ओ३म् ॥

आर्य्यसिद्धान्त

(५)

यस्य पश्य काव्यं न ममार न जीर्यति ॥

हस्त लिखित

विषय-सूची

चित्र-सूची.

हँसी

(लेखक - श्री याधी)

हँसी! तुम्हीं मुझ को बतलाओ, कौन तुम्हारा असली धाम।
मैं ने तुम्हें बहुत स्थानों पर करते देखा है विश्राम॥

प्रेमी जन के मुख मण्डल पर छुपे हुवे चिर जीवन दूत।
तुम नीरव अव्यक्त भाव से कुछ ऐसी करती करतूत।
बिछुड़े फिर से मिल जाते हैं, चिर व्यथा का होता अन्त।
सूखे हृदय सरोवर में फिर भर जाता है स्नेह अनन्त॥
ईर्षाभरे द्वेष से जलते हृदयों पर तूं परदा डाल।
कभी दिखाया करती पैशाचिक नृत्यों का दृश्य कराल॥
नव युवती के फुल्ल वदन पर दुर्गम परदों को कर पार।
ऐ बेशर्म! फिरा करती तू, बिना किसी संकोच विचार॥
जहां अकेले प्रेमी मिलते, छुप छुप करते प्रेमालाप।
उन की क्षणिक-स्निग्धता लख कर तू करती भारी संलाप॥
जलती क्रोधानिल पर बनती, कभी कभी तू घृत की धार।
कभी बुझा कर जलन हृदय की, भर देती है शान्ति अपार॥
जहां नहीं भाषा जा सकती, वाणी की हो जाती हार।
उन अनुपम भावों के ऊपर, तेरा ही रहता अधिकार॥
ऐ मूकों की अद्भुत वाणी! तुझ को ही पा कर यह लोक।
प्रकट किया करता है, दिल की करुणा मैत्रि प्रेम अरु शोक॥
किस अज्ञात राह से आकर धारे मुख भार बेरे तरार।
क्षण भर रहती; फिर भग जाती, तेरी महिमा अगम अपार॥

हरि-भजन

हरि को नहिं मूढ़ भुलाना रे।
यह तन माटी का पुतला है माटी में मिल जाना रे ॥ ध्रुव ॥

× × ×

जल बुद बुद, हिम अचल, सरिस यह दृग अञ्चल छिप जाना रे।
इस पिंजड़े का प्रिय पक्षी यह अन्त कहीं उड़ जाना रे ॥१॥ हरि को०

× × ×

यह जग अनुपम भूल भुलैया, उलझ उलझ मर जाना रे।
फंसा बीच मृग तृष्णा के तू, भटक भटक रह जाना रे ॥२॥ हरि०

× × ×

ले छोटी सी जीवन नौका भव वारिधि में जाना रे।
भीषण भरी भंवर भीर से, किसी भांति बच जाना रे ॥३॥ हरि को०

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ममता मोह मद्य को पीकर कुमति कुपथ मत जाना रे।
सम्हल सम्हल कर पग धर मग में पांव फिसल गिर जाना रे ॥४॥ हरि०

× × ×

प्रीतम तो उर अन्तर बैठा खोजत कहां अजाना रे?
खोल विवेक विलोचन हरि को मन मन्दिर पा जाना रे ॥५॥ हरि को०



मनु और इन्द्र

प्रत्येक भारतीय ने "मनु" महाराज का नाम कई बार सुना होगा। उन्हीं के नाम से 'मनुस्मृति' नामक ग्रन्थ प्रसिद्ध है जिस में वैयक्तिक, सामाजिक, धार्मिक, तथा राजनैतिक नियमों का विधान है। प्रायः यह समझा जाता है मनु महाराज कोई एक व्यक्ति हुए हैं जिन्हों ने भारत में शासन के नियमों का निर्माण कर अव्यवस्था को दूर किया। प्रकरण-प्राप्त न होने के कारण हम यहां पर इस विषय की आलोचना नहीं करना चाहते। हमारा मत यह है कि मनु नाम से कोई एक व्यक्ति हुए हों, ऐसा नहीं है। व्यास गद्दी का नाम पड़ गया, शङ्कराचार्य भी गद्दी का नाम ही है; इसी प्रकार 'मनु' शब्द भी एक गद्दी के लिये ही प्रयुक्त होता रहा है। 'मनु' शब्द की व्युत्पत्ति 'मन्' धातु से है। संस्कृत में इस शब्द का अर्थ मनन करना, नियम बनाना अथवा legislate करना है। मनु-शब्द का भावार्थ ही नियामक अथवा legislator है। इन अर्थों में 'मनुस्मृति' उस ग्रन्थ का नाम है जिस में भारत के प्रसिद्ध मनुओं के बनाए हुए नियमों का संग्रह हो। मनु जो कोई भी बन सकता था परन्तु इस लिये देश देशान्तरों के शासन नियमों का तुलनात्मक अध्ययन करने की योग्यता अपेक्षित होती थी। जिस व्यक्ति में इतनी योग्यता पायी जाती उसी को 'मनु' अर्थात् 'legislator' की पदवी से विभूषित किया जाता था और उस के निर्दिष्ट किये हुए नियमों पर यथावत् विवेचन कर के उन का समाज में प्रयोग आरम्भ हो जाता था। जिस प्रकार ईजिप्ट के राजाओं को फ़ैरोहा कहा करते थे, पारसियों के शक्तिशील राजाओं को [illegible] कहते थे, हिन्दुओं में शस्त्र से देश-रक्षा तथा देश-विस्तार करने वालों को क्षत्रिय नाम से पुकारते थे इसी प्रकार नियमों के निर्माण में प्रचुर गति रखने वाले विद्वानों को मनु कहा करते थे।

ईजिप्शियन, यहूदी तथा ग्रीक हमारे कथन की पुष्टि करते हैं। ईजिप्ट को शासन के नियम देने वाला मेनीज़ (Manése) था जो कि मनु के अतिरिक्त दूसरा कोई न था। हमारे कथन का यह अभिप्राय नहीं कि भारतवर्ष से मनु महाराज ही ईजिप्ट चले गये थे। अभिप्राय इतना ही है कि भारतवर्ष में नियमों की रचना करने वाले को 'मनु' कहा जाता था। इस लिये ईजिप्शियन लोगों ने—

भी अपने देश में शासन की व्यवस्था करने वाले को 'मेनीज' नाम देना पसन्द किया। यहूदियों में नियमों का विधान करने वाला (law-giver) 'मूसा' (Moses) है। बाइबल के पुराने अहदनामे के अनुसार मूसा ही परमात्मा (जिहोवा) के पास जा कर दस आज्ञाओं (Ten commandments) को लाया था। यहूदियों ने भी अपने नियमों के उपदेष्टा को मनु का ही नाम दिया जो कि उन की भाषा में 'मूसा' के रूप में प्रचलित हुआ। ग्रीक लोगों का नियम-प्रवर्तक माइनोस (Minos) कहाता है। ग्रीक इतिहास के अनुसार 'माइनोस' पूर्व की तरफ से क्रीट शहर में आ कर रहने लगा। उस की विद्वत्ता से प्रभावित हो कर शहर के निवासियों ने उस से नियन्त्रण के नियम बना देने का अनुरोध किया। इस अनुरोध को देख कर उस ने उन से कुछ मोहलत ली और यात्रा करता हुआ ईजिप्ट जा निकला, ईजिप्ट में जाकर उस ने उस देश के नियमों का खूब बारीकी से अध्ययन किया। ईजिप्ट से लौट कर वह एशिया, परशिया आदि होता हुआ सिन्धु नदी के तटों पर भ्रमण करता रहा। इतने लम्बे चौड़े पर्यटन के अनन्तर वह फिर क्रीट को लौट कर चला गया जहां जा कर उस ने देश के लिये नियमों की रचना की। उन नियमों को सारे ग्रीस ने स्वीकार कर लिया। इन नियमों को पढ़ते हुए विद्यार्थी के हृदय में तरह २ के भाव उठते हैं। ग्रीस का वह विधान ईजिप्ट के शासकों से मिलता हुआ भारत में पहुंचा। हो न हो, अवश्य ईजिप्ट के धुरन्धर पण्डितों ने उसे अपने पाण्डित्य को पूर्ण करने के लिये विद्या की खान भारतवर्ष की तरफ संकेत किया होगा। इसी लिये तो वह विद्वान् एशिया को पार कर सिन्धु के किनारों की खाक छानता रहा। जब सब देशों में भ्रमण कर देश को नियन्त्रण में रखने वाले नियमों का उस ने तुलनात्मक अध्ययन कर के ग्रीस की प्रजा के सम्मुख रखा होगा तो उस प्रजा ने भी स्वाभाविक तौर से उसे मनु (Minos) की पदवी से विभूषित किया होगा।

इस प्रकार समझ आ जाता है कि हिन्दुओं का 'मनु', ईजिप्शियनों का 'मेनीज', ग्रीक लोगों का 'माइनोस' तथा यहूदियों का 'मोजेज' — चारों के चारों एक ही मनु शब्द के अपभ्रंश हैं और उन २ देशों में व्यवस्था के नियम बनाने वाले भिन्न २ व्यक्तियों के लिये प्रयुक्त होते रहे हैं। 'मेनीज' — 'माइनोस' — और 'मोजेज' ये नाम बचपन से ही नहीं रखे गये थे परन्तु जब वे २ व्यक्ति नियमों के निर्माता बने तब भारतवर्ष की प्रचलित प्रथा के अनुसार उन का नाम मनु या legislator रखा गया।

जिस प्रकार 'मनु' का नाम भिन्न २ रूप धारण कर संसार की समुन्नत सभ्यताओं का शासन करता रहा इसी प्रकार 'इन्द्र' देवता का विचार भी प्रायः सभी पुराने धर्मों में पाया जाता है। दूसरे धर्मों में इन्द्र का स्थान समझने के लिये हमें भारतीय देवमाला में इन्द्र का स्वरूप समझ लेना चाहिये। संस्कृत में इन्द्र के लिये 'द्यौः' — 'दिवस्पितर' — 'इन्द्र' - 'नेता' आदि शब्द पाये जाते हैं। पुराणों ने इन्द्र को स्वर्ग का अधिपति बत-

लाया है — वह स्वर्ग का राजा है, देवताओं में बहुत ऊँचे स्थान का अधिकारी है। इन्द्र के कब्ज़े में बहुत सी अप्सराएं भी हैं। साधु, सत्पुरुषों का व्रत भङ्ग करने के लिए इन्द्र उन का दुरुपयोग करता ही रहता है। द्यु लोक में उस का निवास स्थान है। वह बिजुली की कड़क में अपने उग्र-रूप को प्रकट किया दिखलाया करता है।

'द्यौः' की विसर्गों को यदि 'स' कर दिया जाय तो 'द्यौः' का रूप 'द्यौस' हो जाता है। 'द्यौस' का अपभ्रंश 'ड्यूस' — 'ज़्यूस' होना कठिन नहीं है। 'ज़्यूस' बन कर ग्रीस में यही देवता 'ज़ियस' (Zeus) बन गया और पुजने लगा। ग्रीक-शब्द शास्त्र के अनुसार Zeus शब्द की उत्पत्ति Dios से होती है अतः यह मानने में तनिक भी सन्देह नहीं रह जाता कि ग्रीक लोगों का सब से मुख्य देवता Zeus वैदिक 'द्यौस' का ही अपभ्रंश है। ग्रीक लोगों को छोड़ दें, रोमन लोगों के यहां भी इन्द्र देवता की पूजा होती है... होती है। रोम का मुख्य देवता 'जुपिटर' (Jupiter) था। यह 'जुपिटर' — 'द्यु पितर' — 'दिवस्पितर्' नहीं तो और क्या है? इन्द्र देवता ही 'ज़ीयस' नाम से ग्रीस में तथा 'जुपिटर' नाम से रोम में पूजा जाने लगा, इस में क्या अब कुछ भी सन्देह रह जाता है? इन सब शब्दों की परस्पर समता विलक्षण है; उसे देख कर किसी भी प्रकार से आकस्मिक नहीं कहा जा सकता। इस के अतिरिक्त इन भिन्न २ देवताओं को सम्मान भी तो इन्द्र का सा दिया गया है। इन सब से काम भी वही कराये गये हैं। रोम के प्रसिद्ध कवि ओविड ने जुपिटर को देवताओं में मुख्य दर्शाया है। सारी देवमण्डली उसे अपना मूर्धन्य मानती है। जुपिटर बारम्बार बिजली की सी गर्जना करता है, — स्मरण रहे कि इन्द्र भी वज्री है — वज्र अर्थात 'विद्युत' के शस्त्र को धारण कर नभोमण्डल में हृदय को कंपा देने वाले घनघोर नाद को किया करता है। ओविड ने जुपिटर को आचार में भी शिथिल दिखलाया है। जब हम स्मरण करते हैं कि इन्द्र के दरबार में भी अप्सराओं की भरमार रहा करती थी, वह दूसरों के आचारों को गिराने के लिये प्राणपन से प्रयत्न किया करता था और साथ ही स्वयं भी कई बार आचार-भ्रष्टता के गढ़ों में गिर करता था तब तो हमें इस बात में ज़रा भी सन्देह नहीं रह जाता कि हो न हो, यह जुपिटर पुराणों के इन्द्र देवता के अतिरिक्त दूसरा कोई नहीं है।

ग्रीकों का 'ज़ीयस', रोमनों का जुपिटर, हिन्दुओं के इन्द्र देवता के ही दूसरे नाम हैं। इस के अतिरिक्त यहूदियों का 'जिहोवा' भी 'द्यौः' का अपभ्रंश मालूम पड़ता है। जिस प्रकार 'द्यौः' का अपभ्रंश 'ज़ियस' हो सकता है उसी तरह 'जिहोवा' भी हो सकता है — शब्द-समता तो इस कल्पना में समर्थक है ही परन्तु जिहोवा का वर्णन भी उसे हिन्दुओं के 'द्यौः' [इन्द्र] का ही अपभ्रंश सिद्ध करता है। यहूदियों के पुराने अहदनामे [Old Testament] में जिहोवा का वर्णन बादल, आग और बिजली के रूप में पाया जाता है। पुराना अहदनामा तो कम से कम इस विषय में बड़ी परिपुष्ट सम्मति देता है कि 'जिहोवा' जो कोई भी हो — वह वैदिक देवता तो अवश्य था। बाइबल की Exodus पुस्तक की तीसरे अध्याय की चौथी आयत में 'जिहोवा'

मूसा को सम्बोधन कर के कहता है कि मेरा नाम "— 'I am that I am' [illegible]" है। इस के निम्नलिखित शब्दों का प्रयोग है वे ध्यान देने योग्य हैं।— ehyeh asher ehyeh अह: अशर अह। पारसियों की ज़िन्दावस्था में परमात्मा अपने बीस नाम गिनाता हुआ प्रथम नाम 'अह्मि' गिनाकर आगे चल कर 'अह्मि यद् अह्मि' यह नाम गिनाता है। पारसी साहित्य से परिचिति रखने वाले पाठकों को विदित होगा कि संस्कृत का 'स'— ज़िन्द-भाषा में जा कर 'ह' बन जाता है। इस प्रकार 'अह्मि यद् अह्मि' का रूप — 'अस्मि यद् अस्मि' — यह बनता है। यह नाम ही यहूदियों के हां उस रूप में पाया जाता है जिस का हम ने ऊपर उल्लेख किया परन्तु प्रारम्भ में यह यजुर्वेद से लिया गया। यजुर्वेद के २म अध्याय

का २[illegible] मन्त्र है, "इदमहं य एवास्मि सोऽस्मि"। क्या यह मन्त्र और पारसियों का 'अह्मि यद् अह्मि' एक ही नहीं है? यदि एक ही है तो मानना पड़ता है कि पारसियों तथा यहूदियों ने इसी मन्त्र के आधार पर अपने देवता का नाम 'अह्मि यद् अह्मि' — 'I am that I am' रखा। कम से कम इस में सन्देह नहीं रह जाता कि कि यहूदियों का 'जिहोवा' कोई न कोई वैदिक देवता था। जो कुछ हम ऊपर लिख आये हैं उस के आधार पर हम यह कहने का साहस करते हैं कि यह देवता इन्द्र होगा। इन्द्र का ही 'द्यौः' नाम ग्रीकों के यहां 'ज़ीयस' पड़ा, इन्द्र ही का 'दि[illegible]' नाम रोमनों के यहां 'जुपिटर' पड़ा और इन्द्र का 'द्यौः' नाम ही यहूदियों में जा कर 'जिहोवा' पड़ गया।

तुलनात्मक धर्म विचार की आवश्यकता

सज्जनगण! आप इस शीर्षक को पढ़ते ही कह उठेंगे कि इस की कोई आवश्यकता नहीं। धर्म का तात्पर्य मनुष्य को अनन्त शक्ति परमात्मा से मिलाना है, धर्म क्रिया में लाने लायक है। इतना काम एक धर्म से भी सिद्ध हो सकता है। यदि हमें वेदों से ही यह निश्चय हो जाता है कि पशु हिंसा बुरा काम है तो बाइबल और कुरान के पन्ने पलटने से क्या लाभ। इस से तो हम केवल समय व्यर्थ गवाँयेंगे।

अपने पक्ष को पुष्ट करने से पूर्व मैं आप के सामने गेटे का वाक्य रख देना चाहता हूं। वह कहा करता था- He who knows one language knows none. इसका यह तात्पर्य नहीं कालिदास तथा शेक्सपीयर जैसे कवि संस्कृत तथा अंग्रेजी भी न जानते, क्योंकि वे संस्कृत तथा इंग्लिश के सिवाय किसी भाषा से परिचय न रखते थे। इस का अभिप्राय यह था कि वे शब्दों के भाव को इतना नहीं समझ सकते जितना बहुभाषावेत्ता जान सकता है।

पाठकगण! आप को यह सुन कर और भी अधिक आश्चर्य होगा कि प्रो. मैक्समूलर ने यह इजहार कर दिया है कि He ~~knows~~ who knows one religion knows none. इसी वाक्य की पुष्टि में मैं आप के सामने कुछ विचार पेश करना चाहता हूं। पूर्व इस के कि मैं अपने विषय पर आऊं मैं धर्म शब्द से मेरा क्या अभिप्राय है यह स्पष्ट कर देना चाहता हूं।

तुलनात्मक धर्म की आवश्यकता

'धर्म' शब्द दो अर्थों में प्रयुक्त होता है।

(क) जब हम यह कहते हैं कि आज-कल भारतवर्ष में हिन्दूधर्म, जैन धर्म, पारसी धर्म आदि प्रचलित हैं इस समय हमारा यह मतलब होता है कि वे सिद्धान्त जो प्रथाओं या पुस्तकों के आधार पर माने जाते हैं वे भारतवर्ष में प्रचलित हैं। इसी लिए जब हम यह कहते हैं कि सोमस इसाइयत से वैदिक धर्म में आ गया, तब हम धर्म शब्द का अर्थ इसी अर्थ में प्रयुक्त करते हैं।

(ख) "आहार निद्रा भय मैथुनं च सामान्यमेतत् पशुभिर्नराणाम्। [illegible] धर्मो हि तेषामधिको विशेषः धर्मेण हीनाः पशुभिः समानाः॥" इस श्लोक में धर्म शब्द उपर्युक्त अर्थ में नहीं आया। यहां धर्म शब्द से हिन्दू धर्म, बौद्ध धर्म आदि अभिप्रेत नहीं प्रत्युत उच्च तथा उत्तम आचरण को यहां धर्म शब्द से कहा गया है।

धर्म के इन दो स्वरूपों को दो भिन्न २ नाम दिये गये हैं।

(क) comparative religion.

(ख) Theoratical religion.

अब आप को मेरे इस उपक्रम का मतलब समझ आ गया होगा। जब मैंने यह कहा कि 'He who knows one religion knows none' तो यहां धर्म (religion) शब्द से पहली प्रकार का धर्म अर्थात् comparative religion ही अभिप्रेत है। Theoratical religion के लिए सब धर्मों का ज्ञान आवश्यक नहीं। यदि मधु घर में ही मिल जाए तो पर्वत पर जाने की कोई आवश्यकता नहीं। नाहीं बहुत धर्मों से सम्मत होना किसी बात की सच्चाई जानने की कसौटी है। इस लिए theoratical religion के लिए मेरा इसरार नहीं। मैं तो इतना कहता हूं कि comparative religion के लिए सब धर्मों का ज्ञान प्राप्त करना आवश्यक है। यदि हम अपनी धार्मिक पुस्तकों के वास्तविक अभिप्राय को जानना चाहते हैं तो अन्य धर्मों का ज्ञान इस बारे में बड़ा सहायक होगा।

संसार के धर्मों की आलोचना करके मैक्समूलर इस परिणाम पर पहुंचे हैं— "Where ever there are traces of human life there are traces also of religion." पहले कुछ आदमियों का विश्वास था कि अफ्रीका की कुछ जाति का कोई धर्म नहीं था परन्तु और अधिक खोज से यह मालूम होने लगा है कि वे भी एक दैवीय शक्ति में विश्वास करते थे। इस स्थापना को मानकर कि धर्म के बिना मनुष्य का जीवन असम्भव है यह देखना है कि संसार के सब धर्मों में कोई समानता है या नहीं। यह तो निर्विवाद है कि धर्मों में परस्पर सम्बन्ध है। झगड़ा इस बात पर है कि इन सब धर्मों के आदि स्रोत कितने हैं और कौन हैं। मैक्समूलर आदि पाश्चात्य विद्वान तो आर्यन धर्म, सेमेटिक धर्म तथा टूरेनियन धर्म, इस प्रकार तीन स्रोत मानते हैं परन्तु कइयों का विश्वास है कि सब धर्मों का आदि स्रोत आर्यन धर्म (वैदिक धर्म) है जिसकी धार्मिक शाखायें हैं।

जब यह भी मान लिया कि संसार के धर्मों में बड़ा सम्बन्ध है और प्रायः सब धर्म आर्यन व सेमेटिक एक श्रेणी या तीन श्रेणियों में विभक्त हो जाते हैं तब यह स्वीकार करते हैं, मैं समझता हूं, कि किसी को संकोच न होगा कि धर्म का वास्तविक स्वरूप समझने के लिए अन्य धर्म सहायक हो सकते हैं।

आजकल जितने धर्म प्रचलित हैं वे प्रायः प्राचीन हैं और वे प्राचीन भाषा के आवरण में ढके हुए हैं। भाषा कितनी अस्थिर व परिवर्तनशील वस्तु है यह सब सज्जन भली प्रकार जानते हैं। जो शब्द पहले जिस अर्थ में आता था वह पीछे से भिन्न अर्थ में ही प्रयुक्त होने लग जाता है। संस्कृत में ऐसे शब्दों को इकट्ठा करके एक बड़ी पुस्तक तैयार की जा सकती है। इसी प्रकार और भाषाओं में भी ऐसे शब्द बहुतायत से मिलते हैं।

तुलनात्मक धर्म की आवश्यकता

इसके सिवाय मुहाविरे आदि भी बदलते रहते हैं। मुहाविरे में प्रयोग. शब्द अपने अभिधार्थ में नहीं प्रयुक्त होते अपितु लाक्षणिक अर्थ में। इस को न जान कर लोग उस शब्द को उसी अर्थ में अभिधा अर्थ समझते हैं। और वेद मन्त्रों के गीत ऐसी दृढ़ स्थापना निःसंकोच होकर कर देते हैं। इसी कारण भिन्न २ भाषाओं का जानना आवश्यक है। जब सब धर्मों का एक स्रोत ही है तो एक बात को सब धर्मों ने भिन्न २ रूपों में प्रकट किया यह मानना पड़ता है। इस को स्वीकार करने से यह तो मानना पड़ता है कि एक धर्म को समझने के लिए अन्य धर्मों का अध्ययन करना आवश्यक है। हो सकता है कि जिन बातों को हमारे धर्मशास्त्रों में आलंकारिक में तथा संक्षेपतः रूप से रखा हो वह किसी धर्म में स्पष्टरूप में मिलती हो। उदाहरणार्थ, बहुत सी बातें पेश की जा सकती हैं। मैं यहां केवल बातें बताऊंगा। सबसे पहले मैं यह बताऊंगी कि पारसी धर्म ने क्या सहायता दी। पशु-हिंसा के निषेध के सिवाय गो-शब्द के अर्थ निर्णय भी किसी हद तक कर सके। जिस भाषा में गौ का स्वरूप वर्णित किया है उसी ढंग में पारसी धर्म पुस्तकों में 'गौ' का स्वरूप वर्णित मिलता है। जिन्दावस्ता में वह वर्णित पढ़ कर "मालूम होगा" यह मानने को बाधित हुए हैं कि इसके आधार पर हम यह भी कह सकते हैं कि वेद में गो शब्द का बहुत सि केवल प्राणिमात्र नहीं अपितु पृथिवी भी। इसी प्रकार ग्रीक, रोमन, मिश्र तथा मेक्सिको आदि धर्म सहायक सिद्ध हुए हैं।

इस लिए मेरी सम्मति में गुरुकुल में इस आवश्यक विषय की बड़ी आवश्यकता है। अकबर बादशाह पूरी सामग्री न प्राप्त करने के कारण इस से पूरा लाभ न उठा परन्तु आजकल तो पाश्चात्य विद्वानों के अनथक परिश्रम ने इस काम को सरल कर दिया है। क्यों इस से पूरा फायदा उठाना चाहिए

नास्तिक-वाद॥

आस्तिकवाद के विरोध में जो बहुत से वाद प्रचलित हैं उनमें बहुदेवतावाद, वेदान्तवाद तथा नास्तिकवाद मुख्य हैं। इन सबको यदि एक परिभाषा में कहा जाय तो अनीश्वरवाद कह सकते हैं। ये सब आपस में अनेक बातों में मतभेद रखते हुए भी इस बात में सहमत हैं कि पवित्रता, बुद्धिमत्ता तथा प्रेम आदि शुभ गुणों को धारण करने वाले किसी परमात्मा की पृथक् सत्ता नहीं। इनमें नास्तिकवाद (Atheism) आस्तिकवाद (Theism) के बिलकुल विपरीत है। अतएव उसके स्वरूप तथा प्राबल्य पर सूक्ष्मरीति से विशेष विचार करना चाहिये।

नास्तिकवाद के प्रचारक इसका कोई निश्चित स्वरूप नहीं बतला सकते। इनके सिद्धान्तों के विषय में उनमें ही आपस में बहुत मतभेद हैं। तथापि इसे निम्न तीन प्रकार से समझा जा सकता है। १- अप्रमाणित-नास्तिकवाद (Dogmatic Atheism) २- संदेहात्मक नास्तिकवाद (Sceptical Atheism) ३- गुणात्मक-नास्तिकवाद (Critical Atheism) जब बिना युक्ति और तर्क के हम दुराग्रहवश मान बैठें कि 'ईश्वर नहीं है' तो इसे अप्रमाणित नास्तिकवाद कहेंगे। किन्तु यदि तर्क तथा युक्ति का आश्रय लेते हुए भी कहा जाय कि चाहे 'ईश्वर हो या न हो वह मनुष्य के ज्ञान से परे है' अथवा 'उसके स्वीकार करने में कोई दृढ़ प्रमाण नहीं' तो इसे क्रमशः संदेहात्मक नास्तिक तथा गुणात्मक नास्तिकवाद कहेंगे। किन्तु यहां ये ध्यान रखना चाहिये कि नास्तिकवाद के ये तीनों प्रकार कभी भी अपने विशुद्ध स्वरूप में नहीं पाये

जाते। इनका पारस्परिक संकर होना अत्यन्त स्वाभाविक हो जाता है। संदेहात्मक नास्तिकवाद तथा प्रमाणात्मक नास्तिकवाद को पृथक् २ देखना अत्यन्त कठिन है, और अप्रमाणित नास्तिकवाद तो स्वभाव में अत्यन्त अप्रमाण होता है।

यहां पर कई लोग नास्तिकवाद की सत्ता में ही सन्देह करते हैं। उनका कथन है कि जब बाह्य-संसार का क्रम तथा नियम और मनुष्य की अपनी प्रकृति भी ईश्वर के अस्तित्व को स्पष्ट उद्घोषित कर रही है, तो यह कैसे सम्भव हो सकता है कि कोई मनुष्य नास्तिक रह सके। किन्तु यह शंका व्यर्थ है। जब कई मनुष्य सच्चे दिल से अपने अन्धविश्वासों पर दृढ़ रहते हैं तो कई ऐसे भी हो सकते हैं जो कि उतने ही सच्चे दिल से परमात्मा का भी निषेध कर सकें। अतएव हमारा कोई अधिकार नहीं कि हम ब्यूक्नैर, गौरलक्रौरेन्स तथा हेकल प्रभृति विद्वानों के गम्भीर खुले तथा साफ शब्दों में कहे गये परमात्मा के निषेधपरक विचारों पर अविश्वास प्रकट करें। तथापि यह सच है कि आजतक किसी बड़े से बड़े नास्तिक विद्वान् ने भी परमात्मा की नास्तिता को सिद्ध करने का प्रयत्न नहीं किया। सब नास्तिकों का बड़े से बड़ा यही प्रयत्न रहा है कि वे अपने अविश्वास को उचित ठहराने के लिये परमात्मा को सिद्ध करने वाली युक्तियों का खण्डनमात्र करें। वास्तव में प्रत्येक पदार्थ की नास्तिता का खण्डन करना होता भी अत्यन्त कठिन है। किसी अज्ञात प्रदेश में जाकर वहां पदचिन्हों आदि की साक्षी से प्राणियों का निवास बड़ी सरलता से प्रतिपादित किया जा सकता है। किन्तु यदि कोई कहे कि यह शून्य देश है — यहां प्राणियों

का निवास नहीं; जो उसे अपने कथन की पुष्टि में उस सारे देश का अवगाहन करना आवश्यक होगा। इसी प्रकार परमात्मा की सिद्धि इस विस्तृत भूमण्डल में छोटे २ कीड़े तथा पत्ते की अद्भुत रचना को देख कर भी की जा सकती है; किन्तु इस साक्षी के होते हुए भी यह कहना कि इसमें परमात्मा का हाथ नहीं अवश्यमेव कहने वाले की हठता तथा अहंमन्यता का प्रकाश करेगा। अतएव जब तक वह इस फैली हुई प्रकृति के ओर २ छोर का ज्ञान कर अपने को त्रिकालदर्शी या सर्व-व्यापक न बनाले तब तक उसका वचन कभी भी प्रामाणिक नहीं हो सकता।

इस उपर्युक्त नास्तिकता के विरुद्ध कोई युक्ति की महाशय होली ओक ने आस्तिकों के ही मत्थे मढ़ने का निष्फल यत्न किया है। उसका कहना है कि परमात्मा की एकता, सत्ता तथा उसे ही संसार का आदि-कारण सिद्ध करने के लिये मनुष्य में सर्वज्ञता तथा सर्वव्यापकता के गुणों का होना नितान्त आवश्यक है। जब तक कोई मनुष्य सर्वज्ञ तथा सर्वव्यापक नहीं बन जाता तब तक वह कैसे कह सकता है कि इस दुनिया के विस्तृत काल और देश में परमात्मा के अतिरिक्त नियम तथा क्रम की व्याख्या का कोई आधार नहीं। हो सकता है कि किसी काल तथा देश में इस बात पर विश्वास करने के लिये काफ़ी प्रमाण हों कि प्रकृति ही स्वयं अपना आदिकारण है।

इस प्रकार यद्यपि महाशय होलीओक ने अपने विरोधी को युक्ति से ही उसका मुंह बन्द करने का प्रयत्न किया है; तथापि वे इसमें सफल नहीं हो सके। उनके कथन में सम्भावना का हेतु और दिया गया है कोई निश्चय परिणाम नहीं निकाला गया। उपसंहार अर्थात् थोड़ी सी भी बुद्धि रखने रखने वालों भी आस्तिक प्रकृति के

दृष्टि से जगत् में रचना की कौशलता को देख कर परमात्मा की ओर विश्वासपूर्वक निर्देश कर सकता है; नास्तिक अपनी शक्ति भर गवेषणा के बाद भी जड़ प्रकृति से जीवन, रूप तथा विकास को स्वाभावता के अतिरिक्त सिद्ध नहीं कर सकता। हां यदि आस्तिकों की ओर से प्रकृति की सत्ता का ही निषेध किया जाता अर्थात् इस कार्य-जगत् के प्रति बिल्कुल ध्यान न दिया जाता तो अवश्यमेव दूसरा पक्ष का इस प्रकार कहना उचित होता। क्योंकि उस अवस्था में 'परमात्मा नहीं है' तथा 'प्रकृति नहीं है' ये दोनों ही स्थापनाएं समान कोटि की होतीं। परन्तु सौभाग्यवश कोई भी ऐसा आस्तिक नहीं जो कि प्रकृति की सत्ता या इसके कारणत्व को बिल्कुल ही अस्वीकार करता हो।

उपर्युक्त युक्ति - जिसे कि महाशय फ्लिंट तथा बालफर्स ने अधिक दृढ़ आधारों पर खड़ा किया है - के अनुसार नास्तिकों को परमात्मा का निषेध करते समय संदेह की अवस्था में ही रहना चाहिये। अपनी अल्पज्ञता तथा परिमितता का ध्यान रखते हुए उनका कोई अधिकार नहीं कि वे निश्चित तौर पर 'परमात्मा नहीं है' ऐसी स्थापना कर सकें। उनका विचार हमेशा ही इस प्रकार सन्देहात्मक होना चाहिये कि 'पता नहीं कोई परमात्मा है या नहीं'। परन्तु प्रायः नास्तिक अपनी उचित सन्देहावस्था में नहीं रहते। वे आगे जाकर ही अपने अधिकार से बाहर होकर 'परमात्मा नहीं है' ऐसी निश्चित अवस्था दे देते हैं। वास्तव में उनके लिये यह है भी बिल्कुल स्वाभाविक। मनुष्य की अपनी प्रकृति या आत्मा संदेह में नहीं रहना चाहती। वह जल्दी से जल्दी किसी निश्चित परिणाम पर पहुंचना चाहती है और हमेशा इस ओर इशारा भी किया करती है। किन्तु नास्तिक प्रायः मार्ग से च्युत होकर अन्धविश्वासियों के समान विपरीत मार्ग पर चले जाते हैं।

(अपूर्ण)

आह्वान

चलो चलें वह कौन बुलाता जगती के उस पार
हैं नक्षत्र नहीं, ये लोचन
बुला रहे मुझको ज्योतिर्शालि
नीलाञ्चल पर उत्सुक बैठा करते कौन विहार। चलो०

बिजली बन बादल में आता
गर्जन का मृदु राग सुनाता
बरसाता अम्बर से मुझ पर अश्रुमयी जलधार। चलो०

स्वर्णकलश से कौन महीतल
दुग्ध-सुधा-सिञ्चित कर शीतल
अम्बर की थाली भर मोती देता क्यों उपहार। चलो०

वृद्ध हुआ, अब कौन सहारा
वत्स! एक तू ही अति प्यारा
कर फैलाये बुला रहा यों शीतकिरण शतबार। चलो०

कुसुमाकर का रूप बनाकर
फूल सुँघाता अञ्जलि भर भर
पल्लव की अंगुली से करता इङ्गित बारम्बार। चलो०

आ जाऊँ, पर है जगजाली
पकड़े है माया मतवाली
तुमने भी न गहा यह कर तो - डूबूँगा मैं मझधार। चलो०

हृदयों का यह जाल बिछा है

मन मोती इनमें रमता है

हृदय जुड़े यदि होवे कोई तब होई पतवार।

'शिवहंस,

राही

इस अनन्त पथ के हे यात्री! सांझ हो गई, ठहर यहीं
रात अंधेरी, पथ दुर्गम है, यहीं ठहर जा, जा न कहीं॥

ऊपर देख, घटायें काली घिरी हुई हैं चारों ओर
रह रह बिजली चमक रही है, भय होवे भी घनघोर
अंधियारा इतना छाया है, कहीं पथ का पता नहीं
इस बेला में कहां जायगा? आज थाम जा, ठहर यहीं॥

इस पथ का तो अन्त न होगा, देख अवस्था की अपनी
फटे बसन हैं, थका बदन है, बेदम नहीं हैं [illegible] (छु)
कब तक और चलेगा भाई एक रात विश्राम सही,
मेरे सूने घर में आजा, इसे बसा जा, ठहर यहीं॥

"राही,,

क्या स्त्रियों को शासन का अधिकार है?

श्री कृष्णचन्द्र जी

संसार की सभी जातियों में स्त्रियों का स्थान तथा गौरवहीन प्रकार का मान जो कि पति का होता था। कई दृष्टान्त इसके विपरीत भी मिलते हैं पर वह इतने थोड़े तथा unpopular हैं कि उनकी उपेक्षा की जासकती है। पुरुषों का स्त्रियों पर प्रभुत्व और स्त्रियों का बालबच्चों का पालन पोषण कर-ना तथा अन्य घरेलू मामलों में ही मग्न रहना प्राचीन सभ्यता का एक मुख्य अंग समझा जाता था। इसमें अनेक गुणों के होते हुए भी यह दोष था कि स्त्रियों का अपने घर से बाहर जगत से संपर्क अनुचित समझा जाता था अतः स्त्रियां राष्ट्र की उन्नति में विशेष तौर पर हाथ नहीं बटा सकती थीं। पुरुषों द्वारा स्त्रियों को "दूध मक्खन का बना कहा तथा त्याज्य पूज्य है" यह उन्हें पद पाल पूर्ण हृदय से नहीं अपितु सच्चे हृदय से पूछना चाहिये।

यूरोप में स्त्रियों की स्थिति के अन्दर संवत् १८४६ (सन् १७८९) की फरांसीसी राज्य क्रान्ति ने जो अन्य राज्यों के सामाजिक तथा शारीरिक बातों पर प्रभाव डाला तथा अन्य उन्नत तथा मान्य राष्ट्रों में युग परिवर्तन किया, वहां पर इसने भी इसमें विशेष रूप से परिवर्तन पैदा किया। लोगों ने समानता, स्वतंत्रता तथा बन्धु भाव से रंगे देश वह इस स्थिति से विशेष लाभ उठाकर एक स्त्री ने संवत् १८४६ (सन् १७८९) में राजा के पास स्त्रियों को अधिकार आदि राज्याधिकार देने विषयक

एक उपयुक्त प्रस्ताव भेजा। फ्रांसीसी जातीय सभा ने इस प्रार्थना पत्र को बड़ी घृणा की दृष्टि से देखा और इस पर किसी प्रकार का ध्यान न दिया। इङ्गलैण्ड में [illegible] व मिल ने तथा फ्रांस में कण्डोरसेट ने स्त्रियों की राजनैतिक स्थिति को उन्नत करने का प्रयत्न किया।

स्त्रियों को राजनैतिक अधिकार देने में निम्नलिखित युक्तियां पेश करते हैं—

(१) पुरुषों के समान स्त्रियां भी एक राष्ट्र की अङ्ग हैं अर्थात् जिस प्रकार से पुरुष का राष्ट्र से है उसी प्रकार स्त्रियों का भी राष्ट्र से है अतः पुरुषों के समान स्त्रियों को भी उत्तम शासन की चाहना है। उत्तम शासन का आधार यदि व्यक्ति विशेष निर्वाचन हो तो यह स्त्रियों को क्यों न दिया जावे। प. सुन्दरलाल इस युक्ति को ठीक नहीं समझते हैं। उनका सिद्धान्त है कि निर्वाचन का सम्बन्ध योग्यता से है न कि उत्तम शासन से। बालकों को निर्वाचन का अधिकार इसलिये नहीं दिया जाता, क्योंकि उनमें योग्यता नहीं। उत्तम शासन की उनको भी चाहिये। यदि केवल उत्तम शासन ही निर्वाचन का आधार होता तो उनको भी निर्वाचन का अधिकार क्यों न दिया जावे। प. सुन्दरलाल के कथन में बहुत सच्चाई है। पर इतिहास को देखने से यह एक स्वाभाविक ही प्रश्न उठता है कि वह कौन से आधार हैं जो स्त्रियों को निर्वाचन के अयोग्य ठहराते हैं। कानून के सदृश कार्य में स्त्रियों को निर्वाचन का अधिकार नहीं। परन्तु मनुष्यों ने कुछ स्त्रियों को निर्वाचन का अधिकार देना ही न्याय युक्त है। जिस प्रकार मनुष्य कानून बनाते हैं और स्त्रियों की अदालत करते हैं और शासन करते हैं उस प्रकार स्त्रियों को

भी वह अधिकार क्यों न मिले। स्वतंत्रता और युक्ति युक्त बात तो यह है कि जिस प्रकार एक पहिये से रथ नहीं चलता और एक हाथ से ताली नहीं बजती उसी प्रकार स्वतंत्रता तथा समानता का रथ तब तक भी दृढ़ता पर नहीं चल सकता जब तक स्त्रियों भी राष्ट्र को न अपनावें। प्रतिनिधित्व तो राजतंत्र में समानता, स्वतन्त्रता तथा समानता का आदर्श क्यों के दृष्टि से यही मिलना चाहिये। जिस चीज को स्त्रियां अपना लेती हैं वह राष्ट्र का अंग बन जाती है। इस प्रकार स्त्रियों को निर्वाचन का अधिकार न देना राष्ट्र के लिये अहितकर है।

(२) पुरुषों के सदृश स्त्रियों को भी अपनी संपत्ति के ऊपर कर देना पड़ता है। राजकर तथा लगान स्त्रियों से भी सरकार पुरुषों के सदृश ही वसूल करती है। यदि इस बात का सिद्धान्त है कि प्रतिनिधि निर्वाचन की कसौटी राजकर है अर्थात् (No taxation without representation) है तो कर स्त्रियां भी देती हैं अतः न्यायानुकूल उन्हें प्रतिनिधि निर्वाचन का तथा शासन करने का अधिकार है। यदि सरकार उनसे कर भी ले किन्तु न माने तो इस सिद्धान्त के अनुसार कुछ हद तक उनका प्रतिनिधि निर्वाचन अन्याय युक्त है।

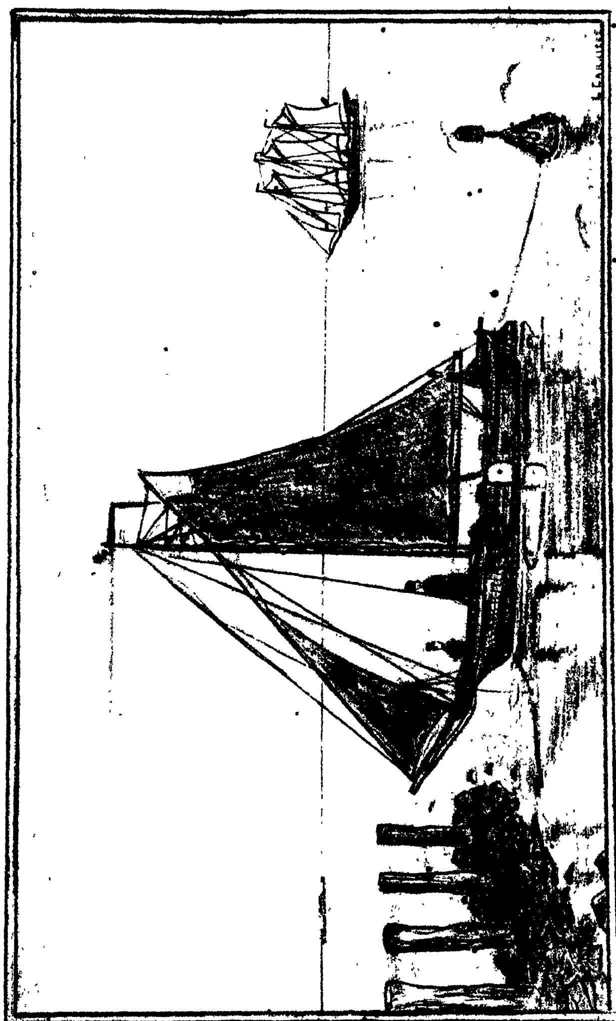
(३) संसार की बहुत सी जातियों में स्त्री भी मनुष्य के सदृश राज्य करती आयी हैं। एलिजाबेथ, ऐन, मेरी, लक्ष्मीबाई तथा विक्टोरिया के नाम इंगलैंड के तौर पर इतिहास प्रसिद्ध हैं। शासन कार्य में स्त्रियों को बड़ी ही घृणा की दृष्टि से देखने वाले ग्लैडस्टन ने अपनी माता को पार्लियामेंट में बैठाया था। यह आक्षेप [illegible] आया। अतः उससे [illegible]

र राज्यनियमद्वारा स्त्रियों का यह अधिकार भी छीन लिया। शासन होते हुए भी आजकल के भारतीय राज्य स्त्रियों को राजगद्दी शासन पर बैठते हैं। इस हालत में स्त्रियों को प्रतिनिधि-निर्वाचन का अधिकार न देना यह अन्याय युक्त है।

यह भी कहा जा सकता है कि एकतंत्र-राज्य पद्धति में राजा का राज्य पर बैठना उसकी लायकी का सूचित नहीं करता। वह राजगद्दी पर इसलिये बैठता है कि वह उसकी वंशपरम्परागत सम्पत्ति है। यदि स्त्रियों को भी पितृसम्पत्ति मिलती है तो कायदे के अनुसार इन्हें भी राजगद्दी पर बैठने देना चाहिये। प्रतिनिधि-शासन में स्त्रियों को शासन तथा निर्वाचन का अधिकार उनकी बुद्धि के अनुसार देना ठीक नहीं है। परन्तु इससे यदि हम दूसरे देशों के देश देखें तो स्त्रियों का प्रतिनिधि निर्वाचन विषयक योग्यता से उत्तम किया जा सकता है। सम्राज्ञी एलिजाबेथ तथा विक्टोरिया के शासनकार्यों की सराहना करते हैं, जिस प्रकार उन्होंने शासन तथा उपकार किये। बहुत से राजा वैसा शासन न कर सके। इसी से ही उनकी योग्यता सिद्ध होती है। अतः अब भी हम यह कहने का दम भर सकते हैं कि स्त्रियों को प्रतिनिधि निर्वाचन तथा शासन का अधिकार देना अन्याय है?

समाज की दशा हर समय बदलती रहती है और इसका बदलना समाज के लिये न्याययुक्त, तथा राष्ट्र के लिये हितकर है। बड़ा राजा रणजीत सिंह ने परिस्थिति को देखकर कहते हुए भी पुराने Laws को [illegible] तथा नये Laws बनाये हैं अतः इसे अधिक आगे नहीं।

आर्य सिद्धान्त —



एक ढंग के स्वभाववालों का यथारीति वि-
धान पर आश्रित रहकर तत्कालीन
परिस्थितियों के कारण शासकों की
उसको ज़रूरत नहीं है। उसको उसकी
दशा के अनुकूल ही शासक मिलना
चाहिये। यदि पुरुषों में वीरता, सा-
हस तथा धैर्य अधिक है तो स्त्रियों
में शान्ति, कोमलता, प्रीति तथा स-
रलता अधिक है। युद्ध के समय सेना-
पति प्रधान पुरुष हो और शान्ति के
समय शांत और प्रेममय राष्ट्र की शा-
सिका स्त्री हो तो इस प्रकार राष्ट्र की द-
शा बहुत उत्तम प्रकार से चल सकती
है। मतलब यह है कि प्रति निधि नि-
र्वाचन का क्षेत्र जितना विस्तृत किया
जावे उतना ही अच्छा है। यदि पुरुषों
में समाजानुकूल दशा के अनुसार
शासक पुरुष न मिलता हो तो स्त्रि-
यों में से ही क्यों न चुनाव किया जावे।
अगर उस समय इस बात की उपेक्षा

की और स्त्रियों की संख्या की दृष्टि से
देखा गया तो निश्चय ही राष्ट्र का ह्रास
शीघ्र होवेगा और अन्त में स्त्रियों को
इसका अधिकार देना ही पड़ेगा।
राष्ट्र को तो उत्तम शासक चाहिये चा-
हे वह स्त्री हो या पुरुष, इससे राष्ट्र को
कुछ भी मतलब नहीं होना चाहि-
ये।

(घ) स्त्रियों का जीवन पारिवारिक है
अधिक है। स्त्री तथा बच्चों का पिता के
अनुकूल वोट देना स्वाभाविक तथा
न्याय युक्त है। इस प्रकार भिन्न २
परिवार एक निश्चित मण्डल राष्ट्र
का धारण करेगा। यह बहुत ही भ-
द्दी धारणा है क्योंकि पुरुषों में राष्ट्र का
मूलाधार परिवार ही था। कुछ पहले
तथा समूह राष्ट्र में शान्ति के साथ
परिवार की मुख्यता का बदला शा-
न्ति वद के अनुसार उचित ही है।
जो पुरुषों में था अगर नहीं बदला जा-

स्था में उत्पन्न हो तो इससे बढ़कर और अच्छा क्या हो सकता है।

(३.) आजकल यूरोपीय राष्ट्रों में स्त्रियें अप्रत्यक्ष तौर पर राजनीति में भाग लेती हैं। पुरुषों पर स्त्रियों का कितना अधिक प्रभाव होता है यह किसी से भी छिपा नहीं। राजनीतिज्ञों का कथन है कि अप्रत्यक्ष हाथ की अपेक्षा प्रत्यक्ष हाथ का होना आवश्यक है नहीं तो अप्रत्यक्ष हाथ भी आड़ में राष्ट्र में भयंकर परिणाम उत्पन्न हो सकते हैं। स्त्रियें परदों में से राष्ट्र की कल पुर्जा फेरें इससे अधिक राष्ट्र के लिये और क्या हानिकर हो सकता है। अच्छा तो यही है कि स्त्रियों को सीधा उनका अधिकार दे दिया जावे और वह अपना उत्तरदायित्व समझती हुई खुले तौर पर राष्ट्रीय कार्यों में भाग लें और उत्तम शासन भी चलावें।

(४) स्त्रियों को शासन का अधिकार था यह भारत के अतीत प्राचीन इतिहास से स्पष्ट तौर पर प्रगट होता है। जब रामचन्द्र जी महाराज पिता की आज्ञा को शिरोधार्य करके वन में तपस्या के लिये १४ वर्ष का वनवास लेने लगे तब सब ब्राह्मणों के पूछने पर वसिष्ठ नरपुंगव वसिष्ठ जी ने कहा था कि-

"अनुष्ठास्यति रामस्य सीता प्रकृतमासनम्। आत्मेयमिति रामस्य पालयिष्यति मेदिनीम्॥" ३७ सर्ग॥

अर्थात् रामचन्द्र जी के बाद सिंहासन पर बैठने का अधिकार सीता जी का है वे ही सिंहासन पर बैठकर अब पृथ्वी पर शासन करेंगी।

इसी प्रकार महाभारत के समय भी जब महाराज युधिष्ठिर राजसूय यज्ञ से पहिले समस्त देशों का विजय कर लेते हैं तब व्यास भगवान उनसे कहते हैं कि हे युधिष्ठिर!

"तेषां कुलेषु यो जातः पालनाराजन सुहृ-
द्गणः। अभिषिञ्च पौत्रांश्च सर्वान्
राज्ये निवेशय॥"

"नालब्धविषय पार्थ स्थापय स्वाभिषेच्य-
दायदम्। राज्यम् प्रकृतीः सर्वाः यदि
पालयितुम् इच्छसि॥"

"कुमारो नास्ति येषां च कन्यास्तत्राभि-
षेचय। कामाशयो हि स्त्रीवर्गः शोक-
माशु प्रहास्यति॥" एवमाश्वास्य जित्वा च
यथेन्द्रो विजयी पुरा॥" शां० अ० / ४३-४४

जिन देशों के राजा तुम्हारे साथ युद्ध में मारे गए हैं उन देशों में जाओ और उनके राजकुलों में मृत राजाओं के भाई, पुत्र तथा पौत्र जो भी योग्य मिल सकें उनका राज्याभिषेक कराओ किन्तु ध्यान रखना कि सब प्रजा तुम से प्रसन्न रहे। यदि किसी कुल में राजकुमार न हो तो वहां राजकन्याओं को सिंहासन पर बिठाकर राज्याभिषेक कराओ।

इसके अतिरिक्त काश्मीर के इतिहास जानने वाले जानते हैं कि वहां सुगन्धा और दिद्दा नाम की दो रानियां सिंहासन पर बैठी थीं। तथा भीलों में तो बहुत सी स्त्रियां राज्यसिंहासन पर बैठ चुकी हैं। महावंश के इतिहास के अनुसार लीलावती नामक एक महिला ने वहां निरन्तर शासन किया। इसके अतिरिक्त प्रमथनाथ बैनर्जी के अनुसार अनुल, सिवली तथा द्विकारमवती, नागकीलिक स्त्रियां वहां शासन कर चुकी हैं। पाण्डव देश के विषय में मेगस्थनीज़ लिखता है कि वहां तो सदा स्त्री ही शासन किया करती थी।

उपर्युक्त कथन साबित करता है कि अति प्राचीन काल में स्त्रियों को पुरुषों के समान राज्य का एक अंग समझा जाता था और उनको भी पुरुषों के समान प्रतिनिधि निर्वाचन का तथा शासन का पूरा अधिकार था।

शासन का अधिकार

इस प्रकार स्पष्ट है कि स्त्रियों को लोकसभा तथा प्रतिनिधि निर्वाचन का अधिकार देकर राष्ट्र को गम्भीर नुकसान न पहुँचाकर कुछ न कुछ लाभ ही पहुँचावेगा। परन्तु एक बात है जिसको अगर हम उपेक्षा कर दें तो इस विवेचन में हम निष्पक्षपात के हृदय से दूर हो-कर बगैर न रह जावेंगे, वह यह कि स्त्रियों को कुछ अधिकार देकर राष्ट्र कुछ खो देगा भी। परिवर्तन में कुछ नष्ट होता है और कुछ उत्पन्न होता है। परिवार का सुख तथा आन्तरिक राजनैतिक विवादों में पड़ने से कुछ न कुछ अवश्य नष्ट या छिन्न भिन्न हो जावेगा। स्त्रियों की कोमलता तथा सौन्दर्य राजनीतिक अधिकारों के पीछे कुछ न कुछ अवश्य ही नुकसान पावेगी। हो सकता है कि किसी राष्ट्र की स्थिति तथा स्वभाव ऐसा हो कि स्त्रियों को निर्वाचन तथा शासन देने का अधिकार देने पर लाभ की अपेक्षा उसको नुकसान अधिक उठाना पड़े। स्त्रियों के कारण बहुत बार राष्ट्र बड़ी भयंकर आपत्ति में पड़ चुके हैं। यह किसी से भी छिपा नहीं। स्त्रियों के अपमान पर मनुष्यों के खून उबल पड़ते हैं। सीता का अपहरण, द्रौपदी का चीरहरण, और राजपूत ललनाओं पर मुसलमानों की कामुक दृष्टि ने राष्ट्रों में द्वेष की अग्नि को भड़का दिया और खून की नदियाँ बहा दीं। राष्ट्र के मामलों में पड़ने से मान अपमान का भूत सिर पर सवार होता ही रहता है। इसमें पड़ कर स्त्रियाँ अपनी इज्जत भी खो देंगी और प्रतिदिन वैमनस्य का बीज बोया करेंगी। इति।

सुनसान गुरुकुल.

घुमड़ि घुमड़ि घन घोर घटा घेरि आई गरज गरज जन मन अकुलाई है।
चम चम चमक चपल चपला ने हाहा चहुं ओर प्राणिन की चख चुंधियाई है।
सां सां कर वायु चलै तीर सों भी तेज जिमि पापिन के हृदय को बेधने सिधाई है,
दृश्य अति भयकर चहुं दिसि दीखत है गगन पै चढ़ मानो इन्द्र सेना आई है॥१॥

दीखत कतहूं नाहि सूरज गगन माहि उर डर मानो तेहि सूरत छिपाई है,
तारे हैं न तारापति रात तारा पथ माहि रात दिन बदरन अंधेर मचाई है।
विपद न एक हटी अबलौं भी ऊपर से झट पट दूसरी भी मुंह बाये आई है,
घटा था घमण्ड न घटा का पल भर भी हा, देखते ही देखते बढ़ बाढ़ चढ़ आई है॥२॥

बड़े २ मन्दिर, प्रसाद, राजगृह सब खान की सामग्री देव! तूने हा नशाई है,
क्या अचर और चर देखा कुछ भी न तूने चीज आई सामने जो पल में मिटाई है।
रहने को थी झोपड़ियां वह भी न तूने देखीं, कृषकों की खेती भी हा तूने ही बहाई है,
निबलों पै अत्याचार करते नहीं हैं बली पर तूने उन पै भी शक्ति आजमाई है॥३॥

कोई घर हीन है, वस्त्र विहीन है, सब भांति दीन हैं शिशु करुण पुकार देती कहीं पै सुनाई है,
कोउ वृक्ष पै खड़ा है, कोउ पानी में पड़ा है देती चहुं ओर हाहाकार ही सुनाई है।
व्याकुल हैं पशु सब मनुज अचर चर रक्षा हेतु त्राहि त्राहि सब ने मचाई है,
पानी ही है पानी चहुं ओर, नहीं ठौर कहीं, प्रलय की रात काली आज ही घिर आई है॥४॥

टूटी वनवासियों की कुटी भी न हनी घर तो भी तूने निज उग्र रोष में चबाई है,
कच्चे कच्चे घर थे और पर्ण की कुटीर थीं वे, दुष्ट देव! वे भी तूने सब बिनसाई हैं।
गाय आदि पशु हर, कंद मूल फल हर, यह भला कीर्ति कौन आज तूने पाई है?
कानन की सुषमा पै रहते थे सदा जो मुग्ध दीन-दल वह भी न लाज तुझे आई है॥५॥

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सुनसान गुरुकुल

आई विपद पै विपद बनिरी पर दिल में निठुर दया न तेरे तनिक भी आई है,
रोष तेरा इतने पै भी न हाय शान्त हुआ, बची खुची चीज को भी अगनि लगाई है,
जतन से जोर जारि जो भी जमा कर पाये, पापी मति तेरी उस पै भी ललचाई है,
कौन जाने क्रूर गति तेरी विधि विधना वे, कह तो रे क्या २ तेरे मन में समाई है? ॥६॥

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इस पर भी न तेरा निठुर पसीजा हिय वज्र से भी कठिन हा तुव निठुराई है,
हार गये हाय हम यत्न कर बार बार, पाया नहीं पार तुव कैसी चतुराई है।
जल अग्नि कोप से बचा था जो भी कुछ-कुछ, उड़ा आंधी से उसे दयालुता दिखाई है,
तोड़ डाला सब कुछ बाग में लगा था जो भी, आज यह तेरी भली बजी शहनाई है ॥७॥

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अब भी न शान्त वायुमण्डल हुआ है सारा धूल ही हा धूल चहुं दिशि में छाई है,
जल अग्नि और वायु भूत का प्रकोप देख जिमि भूमि तल के भी दिल उठ आई है।
देती न दिखाई हरियाली मही मांहि अब रेत ही हा रेत चहुं ओर बिछि गई है,
दूर कर मानो हरी हरी मखमल साड़ी, विधवा ने कफ़न की चादर उढ़ाई है ॥८॥

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औषध भंडार, खादी गृह, यज्ञागार, क्रीड़ा क्षेत्र आदि की भी हा हा धूरी ही समाई है,
कला भवन, रसोनागार, राष्ट्र भंडार और पंचकुटी की भी सब दशा बिनसाई है।
बटुक आवास नहीं, गुरुजन वास नहीं, परि का पट हाजी हना! आज धरा शाई है,
झण्डा नहीं, तारें नहीं, महात्मा गांधी द्वार (गेट) नहीं, हित रोड़ों की पांती आज मिट्टी में समाई है ॥९॥

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उजड़ गई २ टूटे फूटे भवन बचे हैं जंह तंह-देखा, कौलिज के आभाव का नाम ही सुनाई है,
उजड़ गई सारी यह फूल भरी फुलवारी, पत्ती २ रस की भी आज धुर सारई है।
कोयल की कूक नहीं, भ्रमर गुञ्जार नहीं, कौवो कीरी कां कां देती कान में सुनाई है,
लगत मसान और मरघट समान यह सारा सुनसान 'कुल' देता दिखलाई है ॥१०॥



Classification of sciences वा विज्ञानों का विभागीकरण.

पूर्व इसके कि विज्ञान के विषय में कुछ लिखा जाय. विज्ञान की परीक्षा करना आवश्यक है। संक्षेप से यह कह सकते हैं कि संशोधित ज्ञान (correct knowledge) का नामही विज्ञान है। जिस का उद्देश्य क्रमबद्ध शुद्ध सिद्धान्तों को बतलाना मात्र है। किसी विषय का मामूली ज्ञान होना विज्ञान में शामिल नहीं, और नाहीं सन्देहात्मक ज्ञान का नाम विज्ञान है जैसे ग्राम का प्रत्येक मनुष्य (Insect) कृमियों के विषय में कुछ न कुछ जानता है, परन्तु, जब तक वह इस विषय में क्रमबद्ध (systematically) ज्ञान प्राप्त नहीं करता तब तक (entomologist) कभी नहीं कहला सकता। इसी प्रकार यद्यपि प्रत्येक मनुष्य बहुत से पदार्थों के विषय में पर्याप्त ज्ञान रखता है, परन्तु वह वैज्ञानिक नहीं कहला सकता। अतः systematic correct knowledge ही विज्ञान कहला सकता है। ज्ञान (जानने मात्र) का नाम ही विज्ञान है, यदि उसे कार्य रूप में परिणत किया जाय तो वह भी विज्ञान में शामिल नहीं। किसी ज्ञान को जब कार्यरूप में लाया जाता है, या उसके अनुसार क्रिया की जाती है तो वह करना (Art) शिल्पकला के नाम से पुकारा जाता है। यद्यपि art और science का साधारणतया सम्बन्ध प्रतीत होता, और ठीक भी है क्योंकि बहुत सी sciences, arts की आधारभूत हैं। कई sciences में indirect तौर पर art भी सम्मिलित है। परन्तु, तो भी इन की एकता सिद्ध नहीं। इस प्रकार विज्ञान केवल पर दृष्टि डालते हुए अब अपने विषय की ओर झुकते हैं।

सब विज्ञान इस ब्रह्माण्ड (universe) के भिन्न भिन्न भागों पर प्रकाश डालते हैं, और भिन्न भिन्न दृष्टियों से

विज्ञानों का विभागीकरण

रस (की study) पर विचार करते हैं जैसे chemistry प्राकृतिक तत्वों पर विचार करती है, और गणित धरातल (space) और संख्या (numbers) के गुणों (properties) पर प्रकाश डालता है, इत्यादि। इसी प्रकार अन्य सब विज्ञान भी इस संसार के विशेष विशेष अंशों पर विचार करके तद्विषयक सिद्धान्तों का प्रतिपादन करते हैं।

अतः हम कह सकते हैं कि the whole universe is the sphere of sciences अर्थात् यह सारा संसार ही विज्ञान का वायुमण्डल (विज्ञानमय) है। प्रत्येक प्राकृतिक पदार्थ (चाहे वह जड़ हो या चेतन) हमें विज्ञान की ओर ले जाता है। सब प्राकृतिक पदार्थ वा भौतिक तत्व वैज्ञानिक चमत्कार हैं। अस्तु।

पहला सर्वसाधारण विज्ञान गणित है। इसका विषय ऊपर कह चुके हैं।

दूसरा विज्ञान (physics) भूत सम्बन्धी या भौतिक है। यह matter पर विचार करता है। तीसरा (chemistry) वा रसायन है, यह संश्लेषण तथा विश्लेषण द्वारा प्रकृति के तत्वों पर विचार करती है। जैसे यह जल को उद्रजन तथा अम्लजन में विभक्त करके उनके गुणों पर विचार या पुनः उनसे पानी बनाना इत्यादि बातों पर प्रकाश डालती है। रसायन जल की तरह एक गुलाब के फूल को भी विश्लेषण करके उसके तत्व को देख सकती है। परन्तु वह उसे पुनः नहीं बना सकती और न ही उसकी बनावट पर दृष्टि डालती है। इसके लिए एक अलग विज्ञान है जो Biology कहलाता है। इसके दो भाग हैं, एक Botany और दूसरा Zoology जिन्हें क्रमशः वनस्पति विद्या और प्राणिविद्या भी कहते हैं। इसी प्रकार astronomy ज्योतिष इत्यादि विज्ञान भी समझे जाते हैं।

उपर्युक्त सब विज्ञान तथा अन्य बहुत से इसी एक ही श्रेणी के विज्ञान हैं। ये सब प्राकृतिक पदार्थों और तत्वों का प्रतिपादन करते हैं। ये सब material sciences हैं। इस के अतिरिक्त कुछ विज्ञान आध्यात्मिक वा मानसिक हैं। उन के भेद जानने के लिए हमें मन (mind) का विश्लेषण करना चाहिए। मन के भी तीन भाग हैं

I ज्ञान the knowing.

II इच्छा willing.

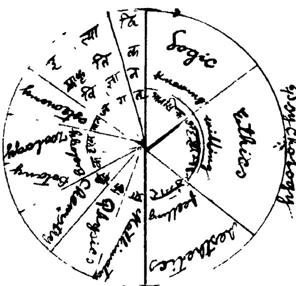
III सुखदुःखानुभव feelling

जब मन के तीन भाग हुए तो तीनों पर विचार करने के लिए तीन विज्ञान होना तो आवश्यक है। परन्तु प्रत्येक पदार्थ वा विषय पर दो प्रकार ~~का पर दो प्रकार~~ से विचार किया जा सकता है (I) जैसा कि वह (पदार्थादि) है, (as it is) और (II) जैसा कि वह होना चाहिए (as it ought to be) उदाहरणार्थ एक छोटे बड़े बाहुओं वाली चतुर्भुज लीजिए। एक ज्यामिति का ज्ञाता गणितज्ञ उस पर और ढंग से विचार करेगा, उस के बाहुओं को नापेगा, कर्ण खेंच कर क्षेत्रफल निकालने का यत्न करेगा इत्यादि २ बातों पर ध्यान देगा परन्तु एक artist चित्रकार उस की बनावट में अशुद्धि छांटेगा और कहेगा कि यह इस तरह बनाना चाहिए था। दोनों ओर की बाहु एक समरूप होनी चाहिएं तब यह अच्छा लगेगा इत्यादि। इसी प्रकार प्रत्येक पदार्थ पर दो प्रकार से विचार किया जा सकता है। एक जैसा उस का स्वरूप है, दूसरे जैसा होना चाहिए। इस के अनुसार मानसिक जगत् के भी तीनों अंशों पर विचार किया गया है और भिन्न २ विज्ञान बने हुए हैं। mental world मानसिक जगत् के तीनों अंशों के वर्तमान स्वरूप पर विचार करने वाला विज्ञान psychology है। यद्यपि sociology आदि भी पृथक् रूप से इस विषय की ओर झुकती हैं परन्तु

विज्ञानों का विभागीकरण

तथापि psychology के अन्तर्गत ही हैं। mental world के तीनों अंशों के 'as ought to be' स्वरूपों पर विचार करने को भिन्न २ sciences हैं। knowing (as ought to be) पर विचार करने के लिए Logic है। जो हमारे विचारों को शुद्ध करता है। willing (as ought to be) पर विचार करने को Ethics है जो इच्छा और क्रिया (कृति) को correct करती है। और feeling (as ought to be) पर Aesthetics विचार करती है। जो beauty का नियामक है।

इस प्रकार यह विज्ञानों का क्रम हुआ। इन को tabular form में दिखाने के लिए हम इस ब्रह्माण्ड को (जो कि विज्ञान का क्षेत्र है, विज्ञानमय है) एक गोला कल्पना करते हैं उस के दो समभाग किए एक mental world का द्योतक २रा material world का प्रकाशक है, प्रकृति विज्ञान सब वस्तुओं या तत्वों के वर्तमान स्वरूप पर ही विचार करते हैं अतः एक विषय पर एक प्रकार का ही विज्ञान है। लेकिन वे स्पष्ट हैं ही। परन्तु मानसिक



विषयों पर दो प्रकार का विचार है। प्रथम तीनों अंशों के मात्र psychology वर्तमान स्वरूपों का प्रतिपादन करती है जो बाणों द्वारा दर्शाया है। और तीनों अंशों पर (as ought to be) को बताने के पृथक पृथक तीन निर्दिष्ट विज्ञानों के द्योतक हैं। इस प्रकार यह सारा जगत् विज्ञानमय है और इस का सामान्यतया उपर्युक्त विभाग किया जा सकता है।

समीर

मिस्री धर्म और वेद॥

लेखक - ब्र. धर्मवीर

—:o:—

संसार के प्रसिद्ध धर्मों पर वैदिक धर्म का विशेष प्रभाव है, केवल प्रभाव नहीं परन्तु कुछ एक धर्मों का साक्षात् स्रोत वेद ही है अथवा दूसरे शब्दों में हम यह कह सकते हैं कि वे धर्म वैदिक धर्म के रूपान्तर ही हैं। पारसी, बौद्धधर्म तथा उपनिषदों के ज्ञानवाद की गणना इसी कोटि में की जा सकती है। शेष धर्म वैदिक धर्म से प्रभावित अवश्य हुए हैं यह बात आज खोजों से निर्विवाद हो चुकी है। यही बात आज मैं ने इस छोटे से निबन्ध में सिद्ध करनी थी. परन्तु स्थान के अभाव से केवल एक ही धर्म पर - जिस का नाम मिस्री धर्म है - प्रकाश डालना चाहता हूं। मैं यह सिद्ध करना चाहता हूं कि मिस्री धर्म भी उन धर्मों से है जिन पर वैदिक धर्म के उज्ज्वल सूर्य ने पर्याप्त अमल प्रकाश की किरण पुञ्ज डाली है। जब एक धर्मों के अनुशीलन करने वाला विद्यार्थी मिश्र के धार्मिक विचारों का अनुशीलन करता है तो वह भारतीय विचारों से कुछ कम समानता नहीं पाता। इस समानता को देख कर वह एकबार अवश्य ही इसी परिणाम पर पहुंचता है कि भारत और मिश्र के विचारों का परस्पर सम्बन्ध अवश्य रहा है। इन दोनों देशों के धर्मों के विकास में अवश्य भिन्नता है - परन्तु प्रारम्भ एक सा ही प्रतीत होता है। यदि हम दोनों देशों के विचार प्रवाहों के साथ २ चलते चले जायें तो निःसन्देह हम एक ही मूल स्रोत में जा पहुंचेंगे। यद्यपि विषय विस्तृत है तथापि इस विषय का दिग्दर्शन मात्र करा देने से ही हमारा अभिप्राय अवश्य सिद्ध हो जायगा ऐसा मेरा विश्वास है।

सब से प्रथम ईश्वर सम्बन्धी विचार को लेते हैं।

अत्यन्त प्राचीन काल में मिश्र के निवासी एक ईश्वर में ही विश्वास करते थे

जैसा कि इन की पुस्तकों के देखने से मालूम पड़ता है।

डा० Tiele का कथन है कि मिश्र में एकदेवतावाद और बहुदेवतावाद दोनों ही साथ साथ प्रचलित थे। निःसन्देह डा० Tiele का कथन कुछ हद तक ठीक भी है। यदि डा० Tiele तथा अन्य पाश्चात्य विद्वान् मिस्री धर्म पर गहरी दृष्टि से विचार करते तो उन्हें इस प्रकार के कथन का अवसर न मिलता। मिस्टर बज जो कि मिस्री धर्म के विषय में प्रामाणिक समझे जाते हैं इन का कथन है कि पाश्चात्य विद्वान् जिस समय पहले पहल मिस्री धर्म का अध्ययन प्रारम्भ करते हैं तो उन्हें वहां pure polytheism ही प्रचार दिखाई देता है परन्तु "When we examine these gods, closely, then they are found to be nothing more or less than forms, or manifestations, or phases, or attributes, of one god, that god being the Sun-god, who, it must be remembered was, the type and symbol of god. (Egyptian religion P. 13)"

वास्तव में बात यही है। जैसे वेद में दोनों प्रतीत होते हैं पर वास्तव में सब का अर्थ एक ईश्वर है। यही व्याख्या मिस्री धर्म में भी लग सकती है। जहां परमात्मा के भिन्न २ गुणों का वर्णन है वहां लोगों ने बहुदेवतावाद समझा जहां कहा कि "इन्द्रं मित्रं वरुणमग्निमाहुः ...... एकं सद्विप्रा बहुधा वदन्ति अग्निं यमं मातरिश्वानमाहुः" वहां एकदेवतावाद समझा। वास्तव में एकदेवतावाद ही वैदिक धर्म का मन्तव्य है। मिस्री धर्म में भी मि० बज का प्रमाण देते हुए हमने यही बात सिद्ध की है। इस विवादात्मक विषय के पश्चात् फिर हम अपने विषय को लेते हैं कि परमात्मा सम्बन्धी विश्वास मिस्री धर्म में क्या है। मि० बज की पुस्तक को पढ़ने से पता लगता है कि मिस्रियों का परमात्मा सम्बन्धी विश्वास बहुत ही उत्कृष्ट था। धर्मों में केवल वैदिक धर्म से ही इस की तुलना ~~पाते हैं।~~ कर सकता है। मि० बज ने अपनी पुस्तक में लिखा है कि पुराने मिश्र के लोग एक ऐसे ईश्वर में

विश्वास करते थे जो स्वयम्भू, अज, अदृश्य, नित्य, सर्वज्ञ, सर्वशक्तिमान्, और अज्ञेय है। जो द्युलोक और पृथिवी लोक तथा पाताल का निर्माता है, जो आकाश और समुद्र, पुरुष तथा स्त्री, पशु पक्षी और मछली और सर्पणशील जन्तु, वृक्ष और वनस्पति का निर्माता है और उन सूक्ष्म प्राणियों का भी उत्पन्न करनेवाला है जो उस की इच्छा और आज्ञा का पालन करने वाले दूत हैं। (Page 14).

अब इस की समानता के बहुत से वैदिक मन्त्र पेश किए जा सकते हैं। उदाहरण के तौर पर हम केवल दो एक को ही दिखाते हैं "सपर्यगाच्छुक्रमकायमित्यादि मन्त्र" "धाता यथापूर्वमकल्पयत्" इति मन्त्र खूब तुलना को दिखाते हैं। इसी प्रकार पत्र १२ पर लिखा है कि वह परमात्मा (जो हापी नाम से प्रसिद्ध है) कभी पत्थरों में नहीं चित्रित किया जा सकता। वेद में भी बिल्कुल ऐसा ही कहा है — न तस्य प्रतिमा अस्ति यस्य नाम महद्यशः।

इसी प्रकार कहा है। God is all (यत्किंचिद् [illegible]) and by Him are all things & all are of his will. Without Him nothing hath been nor is, nor will be. For all things are to Him, in Him & through Him (यस्मिन् भूतानि विश्वे निषेदुरित्यादि) एको वशी सर्वभूतान्तरात्मा एकं विश्वं बहुधा यः करोति इत्यादि।

(2) अनादि तीन चीजें हैं:— पैट्री ने अपनी पुस्तक "Egyptian religious philosophy" के ५३ पत्र पर लिखा है कि "But Cosmos is one, Soul is one, God is one. वेदों के निम्न मन्त्र से इस की तुलना की जा सकती है। "द्वा सुपर्णा सयुजा सखाया समानं वृक्षं परिषस्वजाते" इत्यादि में तीनों - आत्मा - परमात्मा तथा प्रकृति की सत्ता स्वीकार की गई है इसी प्रकार ऋ. १०।११४।४ में "एकः सुपर्णः स समुद्रमाविवेश स इदं विश्वं भुवनं विचष्टे। तं पाकेन मनसा पश्यमन्तितस्तं माता रेळ्हि स उ रेळ्हि मातरम् ॥

(३) आत्मा के अमरत्व में विश्वास:— इसी पुस्तक के ७५ पत्र में लिखा आता है:—
They believe in the immortality of souls, which

came out of the most subtle air (सूक्ष्म वायु) are united to their bodies as in prison ..... and when they are set free ..... they mount upwards. अमर्त्यो मर्त्येना सयोनिः - इस मन्त्र खण्ड का यही तात्पर्य है कि अमरणधर्मा (आत्मा) मरणधर्मा (शरीर) के साथ एक स्थानी है। इस में आत्मा को अमर्त्य बताया है।

(४) पुनर्जन्म :—

मिस्री लोग थियोसोफिस्ट लोगों की तरह Reincarnation के सिद्धान्त नहीं मानते परन्तु वैदिक धर्म के मुख्य सिद्धान्त Metempsychosis (आत्मा का प्रत्येक योनि में आवागमन) को ही मानते हैं। वे कहते हैं कि आत्माओं को पाप के कारण शरीर में कैद किया जाता है व पुण्यात्माएं स्वतन्त्र विचरती हैं। बहुत पाप करने वाली पशु योनि में चली जाती हैं। पुण्यात्माएं अगले जन्म में धर्मात्मा, विद्वान्, गायक, ज्योतिषी, दार्शनिक बनती हैं। यह बात हमारे शास्त्र से इतनी मिलती है कि पैट्री को लिखना पड़ा "Here metempsychosis is fully stated, as in Plato, but it is not in the Egyptian form, and the Indian influence appears already at work." पृष्ठ ४६, ४४.

ऋग्वेद में (१.१६४.३८) में तो यह स्पष्ट ही कहा है कि "अपाङ् प्राङेति स्वधया गृभीतोऽमर्त्यो मर्त्येना सयोनिः॥"

(५) प्रकृति नाश रहित है :—

Matter can not be annihilated nor can space produce matter of itself.

वैदिक धर्म में भी प्रकृति को नाशरहित बताया गया है यथा

(६) यज्ञ विधान :—

मिस्रियों की पुस्तकों में लिखा है कि अग्नि यह विज्ञापन करती है कि कहां तो मुख में सुगन्धित पदार्थ पड़ते थे और आज मांस पड़ता है। यह कथन महाभारत के "श्रूयते हि पुरा कल्पे नृणां व्रीहिमयः पशुः" इस तथा अन्य इसी प्रकार के वाक्यों से इतना मिलता है कि पैट्री को स्वीकार करना पड़ा कि ये निश्चित तौर पर भारतीय भाव हैं। ये हमने दिग्दर्शन मात्र कराने के लिए प्रस्तुत किया है।

हृदय

इस असीम सिन्धु को देखो; इस के छोर का कहीं पता नहीं। यह अनन्त विस्तार वाला और गम्भीर है। इस की छाती पर हजारों तूफ़ान बड़े भयङ्कर और घमासान दङ्गल खेलते हैं परन्तु फिर भी इस की शान्त स्थिति में कुछ फ़रक नहीं पड़ता। अहङ्कार भाव पूर्ण हजारों [illegible] नदियां इस में पड़ कर निज अहङ्कार छोड़ देती हैं तथा मिल कर एक [illegible] जाती हैं। यह सिन्धु अद्वैत है - सारी नदियां अपने द्वैतभाव को छोड़ इस में एक हो जाती हैं। सिन्धु इन का परम स्थान है। यह अनन्त प्राणियों का जीवनदाता और आश्रयस्थान है। सम्पूर्ण [illegible] विभव इस में सुरक्षित हैं।

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ओह! यह निर्दय हृदयशून्य सिन्धु सैकड़ों नहीं अपि तु हज़ारों जन-धन पूर्ण पोतों को अपने विशाल उदर की भेंट करता है। लाखों छोटे मोटे प्राणी इस की शरण में आ कर भी प्रतिक्षण अपने से बड़े और बलवान जन्तुओं का ग्रास बन रहे हैं। शरणागत की रक्षा न करना कितना असह्य पाप है। यह सिन्धु कितना कुटिल है - क्या कहीं इस की कुटिलता की भी कहीं सीमा है? निस्सन्देह; जिस तरह इस का परिमाण असीम है उसी तरह इस की कुटिलता भी असीम है। यही कारण है कि यह सदा असंख्येय तूफ़ानों से इतना अधिक विक्षुब्ध रहता है। ऐसी अवस्था में यह स्वाभाविक ही है कि यह शान्त [illegible] आनन्दपूर्ण पूर्णचन्द्र के शीतल चरणों को ज्वार के बहाने से छूने के लिये [illegible] लालायित हो।

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पर मेरा हृदय सिन्धु इस सिन्धु से कहीं विशाल है। यह नील-सिन्धु मेरे हृदय-सिन्धु की अन्य महान कृतियों के सामने एक छोटी सी कृति के समान है। आंख बन्द करने से कुछ नहीं दीखता, आंख खोलते ही छोटी से छोटी तथा महान से महान वस्तु भी [illegible] रूप में दीखने लगती है। बस, बाह्य चक्षु बन्द कर अन्दर की दृष्टि खोलो — तब गगनचुम्बी तथा चट्टानों को भी दो टूक कर देने वाली [illegible] लहरों से अत्यन्त विक्षुब्ध हृदयसिन्धु की विशालता, भीषणता तथा गम्भीरता का सम्यक् परिज्ञान हो जायगा

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मैं तभी धन्य हूं जब मेरा यह अशान्त और निक्षुब्ध हृदय-सिन्धु शीतल चन्द्र के समान शान्त और आनन्द स्वरूप योगी के चरणों के लिए लालायित हो शान्ति लाभ करे।

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ऐ क्षुद्र मनुष्य! तू इस मेरे हृदय-सिन्धु को खारा समझ कर इसे टेढ़ी निगाह से मत देख। खारा होते हुए भी यह अमूल्य प्रेम-भक्ति आदि अमूल्य और अत्युत्कृष्ट रत्नों से भरा पड़ा है। ऐ नीच पुरुष! तूने खारे पानी से क्या करना है — इस के रत्नों से अपनी झोली भर कर धनी क्यों नहीं हो जाता!

[illegible]

लीन

यह चीर तथा कृष्ण रात्री चन्द्र और इन अनगिनत तारों को साथ ले सफ़ेद दिन में लीन हो रही है।

—:ΛVΛVΛVΛVΛVΛV:—

यह चमकीला दिन दिनकर तथा दिनकर से प्रकाशमान इस [illegible] प्रपञ्च को साथ ले काली रात में लीन हो रहा है।

—:ΛVΛVΛVΛVΛV:—

ये सब वेगवती नदियां अपने साथ जल की आश्चर्यजनक [illegible] जल की राशी को ले अनन्त समुद्र में जा कर लीन हो जाती हैं।

—:ΛVΛVΛVΛVΛV:—

प्रत्येक कार्य अपने कारण में लीन हो रहा है तथा प्रत्येक कारण अपने कार्य में लीन हो रहा है।

—:ΛVΛVΛVΛVΛV:—

कहो वह कौन वस्तु है जिस में यह सब कुछ लीन हो जाता है?

अमङ्गणनम्

१ गुरुकुल में, आज कल, कविता का अत्यन्ताभाव सा दीख रहा है। शायद कविता की बीवारें भी १९२४ सन् वाली भीषण बाढ़ ने गिरा दी है।

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२. संस्कृतसाहित्य की पावन सरिता भी, अब, गुरुकुल में दीखनी असम्भव सी जान पड़ती है। हाय! निर्दय बाढ़ ने इस गरीब पर भी अपना हाथ साफ़ करने से तनिक भी संकोच नहीं किया।

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३. पत्र पत्रिकाओं में, आजकल जीवन नहीं रहा। उन में उत्साह की निराली छटा का अब सर्वथा अभाव है। शायद पत्र-पत्रिका रूपी सुकोमल तथा नन्हे २ पौधों के लिये - आजकल शरद् ऋतु का आगमन हो गया है - क्यों कि अत्यन्त शीत से ये पत्र सूख से गये हैं। देखें, फिर कब हरियावल आती है। - - - - - - - - -

४. आज कल छोटी मोटी मण्डलियों व सभाओं की वृद्धि वर्षा ऋतु में उत्पन्न गजाइयों के ढेर के समान दिनों दिन बढ़ती ही चली जा रही है। ग्रीष्म ऋतु में इतनी अधिक वृद्धि का होना, निस्सन्देह आश्चर्यजनक है।

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५. संस्कृत की "देवगोष्ठी" नामक नामी पत्रिका, जादूगर के ताश की तरह आकार में क्रमशः छोटी ही छोटी होती चली जा रही है। डर है कि कहीं, अन्त में, वह छोटी होते २ अदृश्य ही न हो जाय। ईश्वर इस की रक्षा करें।

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६. महाविद्यालयीय "संस्कृतोत्साहिनी" ने इस बार के संस्कृत-कवितासम्मेलन में सादगी का आदर्श स्थापित कर दिया है। यह पहला ही मौका है जब कि गुरुकुल के असली सादगी के आदर्श को पूर्ण करने का भरसक क्रियात्मिक प्रयत्न किया गया है। "अयि - - - - - - - -"

[illegible]

संसार के महान् पुरुष

एक इङ्गलैण्ड के प्रतिष्ठित सम्पादक, महाशय G. H. Welse के जो कि वर्तमान युग के सब से बड़े ऐतिहासिकों में माने जाते हैं, के पास गये तथा उन से संसार के भूत-भविष्य व वर्तमान के सब से बड़े छः आदमियों के नाम बतलाने की प्रार्थना की। सम्पादक महाशय के पूछने पर उन्होंने निम्न लिखित छः व्यक्ति गिनाए। इन छः में भी सब से पहला नाम उन्होंने Christ का लिया। वे नाम मैं क्रमशः इस रूप से हैं :—

१. ईसा
२. भगवान बुद्ध
३. अशोक
४. बेकन
५. लिङ्कन
६. लूथर

जिस समय महाशय G. H. Welse ने ईसा और बुद्ध इन दो धर्म संस्थापकों का नाम लिया तो सम्पादक महोदय ने, स्वाभाविक ही था, कि यह शङ्का करें कि "क्या धर्मसंस्थापक ही दुनियां में सब से बड़े होते हैं, इस तरह तो हज़रत मुहम्मद भी आप की दृष्टि में इन छः बड़े आदमियों में से एक है"। यह सुन कर G. H. Welse ने मुहम्मद के विरुद्ध बीसियों बातें कह डालीं और कहा कि मुहम्मद में मेरी तनिक भी श्रद्धा नहीं है। मैं ने बहुत चाहा कि किसी तरह मुहम्मद में मेरी श्रद्धा उत्पन्न हो परन्तु मेरा मन श्रद्धा करने से हर बार revolt करता है।

इस के आगे महाशय G. H. W. ने भी भारतवर्ष के सम्राट् अशोक का नाम लिया। इस पर भी सम्पादक महोदय ने पूर्ववत् प्रश्न किया कि "क्या × बड़े २ विजेता बड़े आदमियों में शुमार हैं?" इस पर उन्हों ने कहा नहीं; मैं नैपोलियन को बड़े आदमियों में शुमार नहीं करता। सम्पादक महोदय ने अशोक का नाम तक भी नहीं सुना हुआ था — इस लिये उन्हों ने बड़ा आश्चर्य प्रगट किया। इस पर G. H. W. ने अशोक का गुणगान कर उन्हें सन्तुष्ट किया।

देखें हमारे आर्यसमाजी भाई अपने कार्यों से महर्षि का कौन सा स्थान (पद) निश्चित करते हैं।

शुद्धि:

हिन्दू संगठन पर बहुत आक्षेप होते हैं। एक ओर तो हमारे कई हिन्दु भाई भी इसका विरोध करते हैं। दूसरी ओर मुसलमान तो स्वाभाविक तथा इस के विरुद्ध हैं ही, क्यों। वे तो अपना भला ही इसमें समझते हैं कि हम जिस तरह भी हो हिन्दुओं को अर्थात् काफिरों को नष्ट कर अपने धर्म का प्रचार करें। जहाँ तक हम इन को अपने धर्म में ला सकें, ले आवें और जो हमारे धर्म को स्वीकार न करें उनका नाश कर दें। इस लिए पहले से ही उन्हों ने हिन्दुओं को मुसलमान बनाना प्रारम्भ कर रक्खा है। इस लिए हम स्पष्ट देख रहे हैं कि हमारी जाति का कितना ह्रास हो चुका है। अभी कुछ सालों में हमारी संख्या २ लाख कम हो चुकी है। उधर मुसलमानों की तथा ईसाइयों की संख्या दिन प्रति दिन बढ़ रही है। हम शुद्ध नहीं करते इस लिए ईसाई तथा मुसलमान हमारी मूर्खता का लाभ उठा रहे हैं। कूँओं में मांस डाल कर अपनी संख्या बढ़ा रहे हैं। हमारी दशा इस समय एक भण्डार की तरह है जिस में से धन तो सदा निकलता रहता है पर जिस में एक कौड़ी भी नहीं आती। जैसे वह भण्डार एक समय बिलकुल खाली हो जाता है उसी प्रकार मुझे डर है शायद हमारी भी यह जाति - जो हज़ारों वर्ष अपने सब कुछ सभ्यता संस्कृति आदि के ... होने के साथ मुसलमान राजाओं के ... हुए निदारुण अत्याचारों के बाद भी अपना अस्तित्व अब भी बनाये हुई है वह कहीं अन्य जातियों में समा कर नष्ट न हो जाय। मौलाना हसन निज़ामी कहते हैं कि मुसलमान ५० लाख हिन्दुओं को अपना लेंगे क्योंकि आर्यों में जज़्ब करने की शक्ति नहीं है। क्या अब भी आप को हिन्दू संगठन के लिए आवश्यक शुद्धि के विषय में सन्देह है? मेरी तो सम्मति ... कि जो हिन्दू जाति के रक्षक हैं, उसकी उन्नति की आकांक्षा रखते हैं, अपने हिन्दुत्व पर अभिमान करते हैं। उन को शुद्धि का विरोध छोड़ कर जाति की रक्षा के लिए अग्रेसर

होना चाहिए। शुद्धि ही हिन्दू संगठन का एक मात्र उपाय है। इस के बिना हमारी हिन्दु जाति एक समय नष्टप्राय हो जायगी। केवल मुसलमान भी तो नहीं परन्तु कांग्रेस वाले भी तो इस का विरोध करने में कसर नहीं छोड़ते। उनका मत यह है कि शुद्धि से हिन्दु मुस्लिम एकता - जो कि स्वराज्य प्राप्ति का एक साधन है - के विरुद्ध ही काम होता दिखाई देता है। पर मेरी तो सम्मति यह है कि हिन्दु मुस्लिम एकता हो ही तब सकती है जब कि दोनों बल में समान हों। जब तक दोनों बल में समान नहीं तब तक एकता स्वप्नमात्र है। किसी कवि ने भी जैसे कहा है " समानशील व्यसनेषु सख्यम् " मुसलमानों को क्या गर्ज़ कि वह हिन्दुओं से एकता करते फिरें जो बलहीन हैं उन्हीं को ही मैत्री की आवश्यकता होती है जैसे किसी कवि ने कहा है " भवति हि गोमायु- सखा न दन्तिनः "। गांधी जी के इन शब्दों से स्पष्ट है कि हिन्दु बलहीन हैं तथा यवन बलशाली हैं कि "Hindus are cowards and Muslims are bullies" अर्थात् हिन्दु कायर हैं। कई कहा करते हैं कि हिन्दुओं का संगठन हो ही नहीं सकता, इन को प्रगतिशील बनाना असम्भव है परन्तु मैं यह कहता हूं कि जब ईसाइयों के रोमन कैथोलिक, प्रा॰ स्टेन आदि भिन्न २ धर्म वाले एक हो सकते हैं और मुसलमानों के शिया सुन्नी आदि सम्प्रदाय वाले एक हो सकते हैं तो क्या एक धर्म और एक संस्कृति वाले हिन्दु अपनी जाति की रक्षा के लिए एक नहीं हो सकते ! हो सकते हैं और अवश्य ही हो सकते हैं। जब बारम्बार मुसलमानों से सताये जायेंगे तब स्वयं मिल जायेंगे और तब हिन्दु संगठन पूरा हो जायगा। यदि अभी तक हम ने ~~[illegible]~~ अपनी उन्नति नहीं की तो समयान्तर में स्वयं हम चेतेंगे और फिर हम इसी बात पर आयेंगे मेरा तो यही विश्वास है। कई स्थानों पर सारा धन हिन्दू कमाते हैं पर उसको भोगने वाले मुसलमान होते हैं। इस से स्पष्ट है कि हम गुलाम हो चुके हैं।

हमें शुद्धि द्वारा उन्नति का उपाय करना चाहिए। कई कह दिया करते हैं कि पहले शुद्धि नहीं होती थी और हिन्दू संगठन नहीं था। पहले मैं हिन्दू संगठन के विषय में कहूंगा कि यदि पहले हिन्दू संगठन नहीं था तो चन्द्रगुप्त, विक्रमादित्य अशोक जैसे चक्रवर्ती राजा हुए। यदि हम वेद पर ही दृष्टि डालें तो हमें स्पष्ट पता लग सकता कि पहले जमाने में शुद्धि होती थी। यह पाश्चात्यों के कथनानुसार बहुत पहले बने ऋग्वेद के ९वें मण्डल के ६३ सूक्त ५वें मन्त्र "कृण्वन्तो विश्वमार्यम्" इस से स्पष्ट है। महाभारत को ही लीजिए जिस में स्पष्ट तौर पर लिखा है "गणिकागर्भसम्भूतो वसिष्ठश्च महामुनिः। तपसा ब्राह्मणो जातः संस्कारस्तत्र कारणम्" वसिष्ठ जी का गोत्र अब ब्राह्मणों में पवित्र माना जाता है इस से स्पष्ट है कि उन की शुद्धि हुई होगी। पाराशर तथा व्यास जी को लीजिए उन के विषय में भी एक श्लोक है --

"जातो व्यासस्तु कैवर्त्याः, श्वपाक्यास्तु पराशरः। बहवोऽन्येऽपि विप्रत्वं प्राप्ता ये पूर्वमद्विजाः।" व्यास जी का जन्म मल्लाह की पुत्री योजनगन्धा से होना स्पष्ट है। वे भी शुद्ध किये गये होंगे यह भी शुद्धि के लिए प्रमाण है। जो पण्डे प्रायः विरोध किया करते हैं उन के सम्मत पुराणों को ही देखिए। भविष्य पुराण प्रतिसर्ग पर्व खंड ३४ अध्याय २१ में लिखा है "सरस्वत्याज्ञया कण्वो मिश्रदेशमुपाययौ।, म्लेच्छान् संस्कृतमाभाष्य तदा दशसहस्रकान्। सपत्नीकांश्च तान् म्लेच्छान् शूद्रवर्णाय चाकरोत्।" इत्यादि से शुद्धि स्पष्ट है। इसी पुराण में आगे "मिश्रदेशोद्भवाः म्लेच्छाः काश्यपेन सुशासिताः, संस्कृताः शूद्रवर्णेन ब्रह्मवर्णमुपागताः, शिखा सूत्रं समाधाय पठित्वा वेदमुत्तमम्" इत्यादि से शुद्धि स्पष्ट ही है। देवल मुनि के धर्मशास्त्र में भी इसी प्रकार "बलाद्दासी कृतो म्लेच्छैश्चाण्डालाद्यैश्च दस्युभिः, अशुभं कारितं कर्म गवादि प्राणि हिंसनम्

उच्छिष्टं भार्जनं चैव तथा तस्यैव भक्षणम् ।

इत्यादि श्लोकों के अन्त में इन अति घोर तथा मन में से सदाचारिक भावों का एक दम लोप कर देने वाले पापों का प्रायश्चित्त बताया है। इतिहास पर यदि नज़र डाली जाय तो पता लगता है कि यहाँ विदेशों से कई हूण आदि जातियाँ आईं तथा समय समय पर सिकन्दर जैसे आक्रान्ताओं के साथ भी कई मनुष्य आये जो सिन्ध में रहा करते थे और [illegible] कहाते थे। वे मनुष्य और जातियाँ यहाँ की सभ्यता में घुल मिल गईं और अब उनका पता भी नहीं चलता। इस से भी पुराने समय में शुद्धि का होना पता लगता है। [illegible] अशोक का बौद्धधर्म प्रचार इस बात का ज्वलन्त प्रमाण है। काबुल का राजा मिनान्डर भी शुद्ध किया गया था जैसा कि शिला लेखों से पता लगा है कि वह बौद्ध बना। इसी लिए उसके सिक्कों के एक ओर धर्म चक्र पाया जाता है। वायुपुराण तथा मत्स्य पुराण से पता लगता है कि बुद्ध भगवान् के उपदेश को न समझ कर दस करोड़ मनुष्यों ने वैदिक सभ्यता छोड़ दी इसके बाद स्वामी शंकर ने अग्नि वंशज क्षत्रियों की सहायता से शंख ध्वनि कर शुद्ध कर उन को आर्य बनाया। इसी प्रकार ब्रह्म पुराण में भी "वृत्ते स्थिते च शूद्रोऽपि ब्राह्मणत्वञ्च गच्छति" आदि श्लोकों से इस विषयक ध्वनि निकलती है॥ महाराष्ट्र देश को स्वतन्त्र करने वाले शिवाजी ने रामदास की आज्ञा से मुसलमानों को हिन्दु बना कर मराठों में मिलाया था। बाजीराव निम्बालकर बीजापुर बादशाह के दर्बार में रहते थे। एक बार किन्हीं कारणों से बाध्य होकर उन्हें मुसलमान बनना पड़ा और बीजापुर बादशाह की लड़की से विवाह भी होगया। पर जब बाजीराव को पश्चात्ताप हुआ तब उसने जीजिबाई से कहा। जीजिबाई ने पण्डितराव की व्यवस्था लेकर तीर्थ में स्नान करा शुद्ध किया। इस प्रकार कई अन्य भी प्रमाण शुद्धि की पुरातनता में दिये जासकते हैं पर इतने ही काफ़ी हैं। अतः शुद्धि करनी चाहिए



"मीन व्यथा"

"श्री आनन्द"

मीन व्यथा- देख हंडप हंडसे निकली हुई।
उछ उछ उछल खिच खिचकर खिच कर रह गई॥

आस जीवन की तजी रोने लगी।
आंख से असुअन झड़ी लग कर चली॥

देख यों अरमान दिल का है बना।
उबडबाती आंख से मोती गिरा॥

एक सीपिन मुंह में आ जो गिरा।
खून का कतरा वहीं अमृत बना॥

इस तरह की योनियां जब दे चुके।
खिलखिलाती आस भी बुझने लगी।

बगुले का आगमन - फड़फड़ाते देख बगुला आ गया।
दूत यम का प्राण लेने के लिये॥

दोहा- अपन नयन सब मार कर मछली हुई निराश।
तड़प २ कर रह गई बुझी न दिल की आस॥

बगुले की कहानी- देखे टेंगन टेंग यूं जोगी बना।
ईश के गुण गान यूं गाने लगा॥

भूल अपने को वहां पर बह गया।
प्रेम का आंसू अचानक बह गया॥

आंसू की करामात- देखते ही देखते जीवन बना।
मीन का घटता कलेजा बच गया॥

आंख की ऊपर उठी करुणा भरी।

ईश के गुण गान में वह रत हुई॥

भूल कर वह सब व्यथा, वे खिल गई।

रात फिर से चान्दनी सी बन गई॥

नयन से बहने लगीं मोती लड़ी।

हो आभारी योगी के चरणों लगी॥

बगुले का योग भंग- छोड़ निद्रा योग बीच रोष से।

चोंच को अपनी सम्हालने लग गया॥

बाढ़ इतने में नदी में आ गई।

देखते ही आंख ओझल हो गई॥

बगुले के प्रति- दर्प से ऐंठा हुआ तू है धरा ही रह गया।

अब-बस बसन्दर ले शिकार। मुंह फेरा ले गया॥

छूट गई सब आशा मुण्ड़। आंसू बहने लगी।

बहते हुए आकर अचानक छाती का तमाशा बनी॥

झरते हुए इक बूंद आकर सीप के मुंह में पड़ी।

आकर वहां वह चमचमाती चांदी का मोती बनी॥

बसन्त के आकर के मोंही झट पल गोलनी के बदा।

फिर देखते ही देखते वह आप मोती बन गई॥

बगुले को धन्यवाद- हे गुरु तेरा आज योगी मीत दिल से कर गई।

और दर्प की ऐंठ वह खरल में दू भुं तेरी कर गई॥ वह दिल जलाती रह गई पर

दिल वह तुम को दे गई। शिक्षा भलाई की तुम्हारे चित्त से वह ले गई॥

सम्पादकीय टिप्पणियां

बाह्य-जगत

१ आर्यसमाज में शिक्षा

"आर्यसेवक" नामक समाचार-पत्र में, महाशय देवीचन्द जी, principle D.A.V. High school, होशियारपुर, द्वारा प्रकाशित आर्यसमाज में शिक्षा की रिपोर्ट को अत्यन्त संक्षेप से उद्धृत किया गया। हम भी इसे अपने पत्र में संक्षेप से उद्धृत करते हैं :—

"भारतवर्ष में कुल ६६६ शिक्षणालय हैं जिन में २२६० अध्यापक या पाठक पढ़ाते हैं। इन शिक्षणालयों में सब मिला के कुल ५४,८८६ विद्यार्थी शिक्षा ग्रहण करते हैं। इन शिक्षणालयों के खर्च में प्रतिवर्ष १८,८४,४८२. ॥≡)११ खर्च होता है। प्रत्येक विद्यार्थी पर प्रतिमास ३३. ।।।−)११ खर्च होता है, तथा प्रत्येक लड़की पर प्रतिमास १६. ॥=)२ खर्च होता है। इन सब पाठशालाओं के स्थान आदि में कुल ६५,३६,२३८ ॥≡)११ खर्च हुआ है। कई पाठशालाएं समाज-मन्दिर में हो लगती हैं। इन कुल शिक्षणालयों में ८ College लड़कों के लिए है तथा दो college लड़कियों के लिये है; ६३ High school लड़कों के लिये तथा १ High school लड़कियों के लिये है; ६० middle school लड़कों के लिये हैं तथा ५२ middle school लड़कियों के लिये हैं। इसी प्रकार ११४ primary school लड़कों के लिये हैं तथा १११ primary school लड़कियों के लिये है। — — — ८ संस्कृत-पाठशालाएं हैं; ८०-हिन्दी-शिक्षणालय हैं। ३१ गुरुकुल हैं। ५५ अछूत जातियों की संस्थाएं हैं। इन के अलावा अन्य भी कई थोड़ी सी छोटी-मोटी संस्थाएं हैं। इस के आगे महाशय देवीचन्द जी लिखते हैं :—

सब से अधिक शिक्षा प्रचार पञ्जाब में है और इसी से उनकी धर्मपरायणता ज्ञात होती है। यदि सब प्रान्तों के आर्य सज्जन भी पञ्जाबियों के सदृश सच्चे दिल से काम करने लगें तो सम्भव है कि भारत में वैदिक धर्म की

शिक्षा शीघ्र ही सम्पन्न हो जाय। पञ्जाब से दूसरे नम्बर पर शिक्षा का प्रचार यू. पी. में है।"

महाशय देवीचंद जी ने यह Report तैयार कर के, निस्सन्देह, हमें शिक्षा-विषयक समस्याओं पर आसानी तथा गम्भीरता-पूर्वक विचार करने में सहायता दी है। हम इस समय इन समस्याओं पर विचार नहीं करना चाहते; केवल देवीचन्द जी के उपर्युक्त निर्णय पर ही अपनी सम्मति प्रकाशित करेंगे। म. देवीचन्द जी लिखते हैं कि पञ्जाब में इतनी अधिक शिक्षा का प्रचार होना इस बात का सबूत है कि पञ्जाबी धर्मपरायण हैं। हम पञ्जाबियों की धर्मपरायणता पर नुक्ताचीनी नहीं करना चाहते परन्तु फिर भी देवीचन्द जी के कथन के विरुद्ध यह अवश्य कहना चाहते हैं कि शिक्षा तथा धर्मपरायणता में कोई समवाय-सम्बन्ध नहीं है। प्रसिद्ध England के प्रसिद्ध विद्वान Herbert Spencer किसी प्रकार अपनी पुस्तक में लिखते हैं कि साधारणतया सर्वसाधारण का यह विश्वास है कि पढ़ने लिखने या शिक्षा प्राप्त करने से आदमी में अधिक उन्नत हो जाते हैं तथा वे पहले से अधिक धार्मिक हो जाते हैं। परन्तु वास्तव में देखा जाय तो यह बात सत्य नहीं है क्योंकि Statistics द्वारा यह जाना गया है कि शिक्षित लोग आचार में अनपढ़ लोगों से अधिक गिरे होते हैं; हाँ, यह जरूर है कि पढ़े लिखे लोग अपनी चतुराई के कारण गिरावट को छिपा अवश्य लेते हैं। हम म. Herbert Spencer की बात को भी सर्वांश में सत्य नहीं मानते। परन्तु उन की बात आजकल की शिक्षा के विषय में रुपये में १५ आने ठीक है।

उपर्युक्त Report से पता चलता है कि भारतवर्ष में ३३ गुरुकुल चल रहे हैं। निस्सन्देह, इतनी विपरीत परिस्थितियों के होते हुए इतनी संख्या में गुरुकुलों का चलना अत्यन्त आश्चर्यजनक है। क्या इस से यह स्पष्ट सिद्ध नहीं होता कि भारतभूमि गुरुकुल जैसी संस्थाओं के लिये बहुत उपजाऊ है? केवल, अब, ऐसे साधनों तथा तरीकों को ढूंढ निकालने की आवश्यकता है जिस से गुरुकुल की शिक्षा अत्यन्त सस्ती तथा गरीबों को भी प्राप्य हो सके। वे क्या

उपाय है - इस पर हम किसी अगले अङ्क पर अपने विचार प्रगट करेंगे।

२. सौ साल का कार्यक्रम

शताब्दी-महोत्सव के कारण ही, शायद कई महानुभावों को आर्यसमाज का पहिले से ही सौ साल का कार्यक्रम बनाने की सूझी है। मेरे विचार में यह सूझ आर्यसमाज की उन्नति के लिये अत्यन्त लाभप्रद है। सबसे प्रथम-व्यक्ति हमारे सुयोग्य उपाचार्य श्री पं० वेदशर्मा जी हैं जिन्होंने कि बड़े विचार पूर्वक आर्यसमाज के शत सांवत्सरिक कार्यक्रम को हमारे सामने उपस्थित किया है। आशा है कि थोड़े दिनों में जङ्गल की बूटियों की तरह ऐसे कार्यक्रम-निर्माताओं की अत्यधिक वृद्धि हो जायगी। इस नवीन विचार के जन्मदाता निस्सन्देह सुयोग्य पं० जी ही हैं, हम पण्डित जी के कार्यक्रम को अतीव संक्षेप से नीचे लिखते हैं।

(१.) १५ वर्ष - देश की स्वाधीनता प्राप्त करना।

(२.) २० वर्ष - स्वराज्य स्थिरता व शासक प्रणाली को वैदिक धर्मानुकूल करना।

(३.) २५ वर्ष - सर्वत्र शिक्षा प्रचार।

(४.) २० वर्ष - वेदानुसार निर्णय

(५) वैदिक सभ्यता के अनुकूल राष्ट्र संगठन, तथा आश्रम सुधार।

(६) २० वर्ष - वैदिक सभ्यता के अनुसार राष्ट्र संगठन - वर्णसुधार।

पण्डित जी के उपर्युक्त कार्यक्रम के साथ हमारी हार्दिक सहानुभूति है परन्तु हमारी इस कार्यक्रम के साथ पूर्ण सम्मति नहीं है। पं० जी को इस बात को अच्छी तरह जानते ही हैं कि भारत वर्ष में केवल आर्यसमाजियों का ही निवास नहीं है अपि तु भिन्न २ मतावलम्बियों का यह घर है। केवल सहानुभूति प्राप्त कर लेने से ही यह आशा कर लेना कि आर्यसमाज राष्ट्र को वैदिक आदर्श के अनुकूल चलाने में समर्थ हो जायगा दुराशामात्र ही है, यह बात सम्यक् तया समझ लेनी चाहिये कि जिस सभ्यता को जितना समय गिरने में लगा है उठने के लिये उस से भी कई गुणा समय लगेगा। इस तरह यह कार्यक्रम १०० सालों में पूर्ण न हो कर, १००० सालों में भी शायद मुश्किल से ही पूरा हो।

हां, हम पण्डित जी के प्रथम १५ वर्ष के कार्यक्रम से पूर्णतया सहमत हैं। निस्सन्देह, यदि आर्यसमाज स्वराज्य-प्राप्ति के नेतृत्व को स्वीकार कर भारत को स्वराज्य दिलवाए तो यह सर्वप्रिय हो जायगा - आर्यसमाज का यश और नाम होगा - इस का बहुत प्रचार होगा।

इस बात में हमें यह कहना है कि

पं. जी ने जो अपने कार्य-क्रम को क्रमशः १५, १०, २५, २०, २० भागों में बांटा है - इस में कौन सी आन्तरिक-दृष्टि काम कर रही है। प्रत्येक विभाग में उपर्युक्त तरीके से भीतरी वर्ग-विभाग किया गया है। यह समझ में नहीं आता।

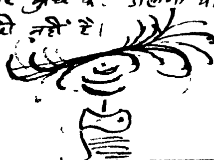
यह कार्य-क्रम देखने से हमें भी बड़ा प्रिय लगता है परन्तु इस की व्यावहारिकता में सन्देह होने से हमें दुःख भी अवश्य होता है। परमेश्वर करे कि यह हवाई कार्यक्रम सच-मुच पूर्ण हो।

3. महात्मा गान्धी

महात्मा जी को इस बार के भ्रमण में आशातीत सम्मान प्राप्त हुआ है। महात्मा जी के इस सन्मान को देख कर, अनेक पुरुषों का यह विचार हो रहा कि है कि महात्मा जी का जेल से पूर्व का युग फिर लौटना ही चाहता है। परन्तु हमारी सम्मति है कि यह बुझते दीपक की उत्कृष्ट ज्योति है जो कि दीपक की मृत्यु को सूचित करती है। निस्सन्देह महात्मा जी के सामयिक आन्दोलन ने जनता पर जादू का सा असर किया परन्तु अब जादू जनता के सिर से उतर गया है। इस प्रगति या आन्दोलन की मृत्यु से ही यह सूचित होता है कि रोगी देश के लिये किसी अन्य औषधि की आवश्यकता है। रोग पहचान कर समुचित औषधि देना तो कुशल वैद्यों का ही काम है। इस लिये देश के आगे कोई नया ही कार्य-क्रम उपस्थित करने की आवश्यकता है। कोई इस तरह की दवा देनी चाहिये जिसे रोगी पचा भी सके।

४. वर्णाश्रमधर्म प्रचार :—

आज कल आर्यसमाज में वर्णाश्रमधर्म के प्रचार की लहर बड़े ज़ोर से उठ रही है। देखना यह है कि यह लहर स्वयं आवश्यकतावश आर्यसमाज में उठ रही है—या इस लहर को कुछ शक्तिशाली [illegible], जनता की अपनी इच्छा के न होते हुए भी, बलात्कार से उठवा रहे हैं। मेरी समझ में पिछली बात ही है। इस के अनुसार यह आर्यसमाज में यह गति देना लाभकारी सिद्ध नहीं होगा क्योंकि यह स्वाभाविक नहीं है। इस से आर्यसमाज को हानी पहुंचने की ही सम्भावना है - [illegible]। अतः इस विषय में बहुत देखभाल कर आगे कदम धरना चाहिये। " must do some-thing " impulse कई बार बड़े गहरे गढ़े में भी धकेल सकती है "कुछ करना है" इस लिये बिना विचारे कुछ कर डालना यह नीति अच्छी नहीं है।



सम्पादकीय टिप्पणियां
गुरुकुल-जगत्

जिस तरह ग्रीष्म ऋतु में नदियों का पानी दिनों दिन बढ़ता ही चला जाता है उसी तरह गुरुकुलीय सभाएं भी ग्रीष्म ऋतु में ही आश्चर्यजनक तीव्र उन्नति करती हैं। इस वर्ष भी अन्य वर्षों की तरह सभाएं बहुत [illegible] सफलता [illegible] चल रही हैं। [illegible] भी अन्य वर्षों की अपेक्षा अधिक [illegible] विद्यालय की सभाएं, विद्यालय के इस स्थान से उठ जाने के कारण, अपना [illegible] सभाओं पर नहीं डाल सकती। यह [illegible] महाविद्यालय की सभाओं की उन्नति के लिये बाधक ही है। हम नीचे प्रत्येक [illegible] पर [illegible] उस का विवरण [illegible]।

<u>आर्य-सिद्धान्त परिषद्</u> इस में सभा के [illegible] प्रकार के कार्यकर्ताओं का निम्नलिखित रीति से निर्वाचन किया है।

1. मन्त्री = ब्र. धर्मवीर [illegible] से निर्वाचित हुआ।
2. उपमन्त्री = ब्र. [illegible]नन्द [illegible]
3. कार्यकारिणी के सदस्य = मन्त्री और [illegible] के अतिरिक्त ब्र. सुखदेव, ब्र. [illegible]
   - ये तीनों कार्यकारिणी के [illegible]।

कार्यकारिणी के निश्चय के अनुसार ब्र. जयदेव "आर्यसिद्धान्त-पत्रिका" के सम्पादक निर्वाचित हुए तथा ब्र. पूर्णानन्द उपसम्पादक निश्चित किये गये।

वर्तमान अवस्थाओं को देख कर निश्चय होता है कि आर्य-सिद्धान्त-परिषद् का अगला अधिवेशन पूर्ववर्षों की अपेक्षा बहुत सफलता-पूर्वक होगा।

साहित्य-परिषद् :— यह सभा अन्य सभाओं की अपेक्षा स्थिति के लिहाज़ से वृद्ध समझी जाती है। इस सभा की ओर से "बुद्ध-जयन्ती" मनाई गई जो सफलता पूर्वक समाप्त हुई। हाल ही में साहित्य-परिषद् में श्री पण्डित वागीश्वर जी विद्यालङ्कार का "कालिदास" पर अत्यन्त योग्यतासम्पन्न तथा गवेषणापूर्ण निबन्ध हुआ। अभी यह निबन्ध समाप्त नहीं हुआ। इस निबन्ध की श्रोतृवृन्द ने भूरि२ प्रशंसा की। इस से सभा की उन्नति सूचित होती है। आशा है कि यह सभा वृद्ध होती हुई भी युवा की तरह जोश से अ-पना कार्य सम्पादन करेगी।

संस्कृतोत्साहिनी-सभा :— इस सभा के विषय में इतना ही कहना है कि इसकी स्थिति निराशाजनक है। मन्त्री जी यद्यपि उत्साही तथा परिश्रमी है तो भी इस सभा की ठीक स्थिति करने के लिये इन्हें विशेष प्रयत्न करना चाहिये। यह कमजोरी या ढील वालों की है मन्त्री नहीं। ब्र. समरसिंह जी इस सभा के मन्त्री पद पर नियुक्त हुए है।

<u>वाग्वर्द्धिनी सभा</u> :- इस सभा का यह सौभाग्य समझना चाहिये कि इसे प्रायः उत्साही तथा कर्मपरायण कार्यकर्ता प्राप्त होते रहे हैं। भारत देश की वर्तमान परिस्थितियाँ भी, निःसन्देह, इस की सफलता में कारण हैं। अन्य वर्षों की तरह, इस वर्ष भी इस के अधिवेशन सफलतापूर्वक हो रहे हैं। इस वर्ष में इस सभा की वास्तविक सफलता का अनुमान, हाल ही में होने वाले "हिन्दी-साहित्य" सम्मेलन की सफलता से ही हो सकेगा।

इस वर्ष इस सभा के मन्त्रि पद पर ब्र० शङ्करदेव द्वादश श्रेणी तथा उपमन्त्री पद पर ब्र० रामस्वरूप जी द्वादश श्रेणी नियुक्त हुए हैं। किन्हीं कारणवश, इस समय ब्र० रामस्वरूप जी ने ही मन्त्री के कार्यभार को सम्भाला हुआ है।

<u>विज्ञान-परिषद्</u> :— विज्ञान परिषद का कार्य तथा उत्साह प्रशंसनीय है। कई वर्षों से इस सभा में फिर से नवीन जीवन का संचार हुआ था। इस समय यह सभा किसी अन्य सभा की अपेक्षा कम जोश से नहीं चल रही। प्रतिसप्ताह या प्रतिपक्ष कोई ना कोई योग्यतापूर्ण निबन्ध हो ही जाता है। इस के अधिवेशनों में उपस्थिति भी पर्याप्त होती है।

इस सभा के मन्त्री ब्र० ओ३म् प्रकाश जी नियुक्त हुए हैं। इस परिषद् का प्रत्येक सभासद् ही इस की कार्यकारिणी का भी सदस्य होता है।

<u>आयुर्वेद परिषद्</u> :— यद्यपि यह परिषद् आयु के लिहाज़ से बालक ही है परन्तु अपने कार्य तथा उत्साह के कारण किसी कदर किसी सभा से जवानी में कम नहीं है। इस की आशाएं बहुत बड़ी हैं। दिनों दिन यह सभा उन्नति करती ही चली जा रही है।

सम्पादकीय टिप्पणियां।

इस सभा के मन्त्री ब्र० विष्णुमित्र जी नियुक्त हुए हैं। इस सभा के सब सदस्य बड़े कर्तव्यपरायण तथा उत्साही हैं। इस लिये इस सभा का भविष्य बहुत उज्ज्वल ज्ञात पड़ता है।

कुछ दिन हुए ही, आयुर्वेद परिषद् का जन्मोत्सव, ब्रह्मचारी कृष्णदत्त जी त्रयोदश श्रेणी के सभापतित्व में, बहुत सफलता पूर्वक समाप्त हुआ है। कविताओं में वैद्यक-सम्बन्धी चर्चा होने से उन में साहित्यिक छटा का सर्वथा अभाव होना स्वाभाविक ही था। वर्तमान में इस सभा के सदस्यों में गद्य और पद्य दोनों तरह के अनेक कवि विद्यमान हैं। यह इस सभा के लिये बड़े गौरव की बात है।

English club :- गुरुकुल के प्राचीन उद्देश्यों तथा परिस्थितियों के कारण English की सर्वथा उपेक्षा होती रही है। यही कारण है कि इस सभा ने अन्य सभाओं की तरह कभी ज़ोर नहीं पकड़ा। परन्तु अब यह आवश्यकता अनुभव होने लगी है कि आङ्ग्ल भाषा का अच्छी तरह अध्ययन शिक्षा तथा यश के लिये अत्यन्त आवश्यक है। अतः English club के लिये अब अच्छा क्षेत्र तैयार हो रहा है। आशा है अब यह सभा अपनी यथेष्ट उन्नति करेगी।

हम इस सभा को सम्मति देते हैं कि यदि यह सभा साप्ताहिक या पाक्षिक कोई पत्र प्रकाशित करे तो बहुत उन्नति की सम्भावना है।

ओ३म्

आजका

समय विभाग

बृहस्पतिवार

२०-६-८२

६¾-७ तक राष्ट्रीय झंडे की स्थापना . वन्दे मातरम् , कुलगीत

खेलें —

प्रातः

७ से १०½ तक

कुरसी दौड़

चार टांग की दौड़ (प्रथम बार)

~~[illegible]~~ " " दौड़ "

मैढक दौड़

मक्खी दौड़

अन्धा चूहा

मध्याह्नोत्तर

२½ " "

लम्बी कूद

ऊंची कूद

रस्सा कूद

तकिया युद्ध

तैरी दौड़

बोरी "

सब कुलवासियों को सूचित किया जाता है कि दीपावली के उपलक्ष्य में खेलों का समारोह किया गया है। आप सब महानुभावों से प्रार्थना है कि इसको सफल बनाने में सहयोग दें।

समय विभाग निम्न प्रकार है —

३० - ६ - ८२
बृहस्पतिवार

प्रातः ६-४५ से ७ तक राष्ट्रीय झण्डे की स्थापना
वन्दे मातरम् और कुलगीत

७ से १० तक

मध्यान्होत्तर

बनाना राज का ही कार्य है - इसी प्रकार-
यद्यपि इन्द्रियां ईंटें नहीं ढ़ोती हैं पर उनसे
सामने कल्पनामय आलीशान मकान खड़े-
करना कल्पना शक्ति या मन का ही कार्य है-
यदि दिन को महाभारत का युद्ध पढ़ते हैं-
तो मन में इसी के संस्कार ताज़े होंगे-
और यह स्वप्न में जलती दिया सलाई से-
कौरवों की सेना को जलायेगा। यदि आप-
आप स्कोप में तमाशा देखकर सोए हैं-
तो वहीं के नज़ारों का जलती आग से सं-
बन्ध जुड़ जायगा। यदि आप दिन भर-
सोने की मोहरों में रहे हैं तो आप का मन
आप के आगे आकाश से सोने की वर्षा-
भी कर सकता है—

एवं धीमी चलती हवा आप के-
समीप वर्ती क्रिया से मन पर पड़े ताज़े-
प्रभाव के अनुसार, सभा में छोटे सुन्दर
संगीत, पारस्परिक प्रेमालाप आदि के-
दृश्य दिखायेगा। इसी लिए हमारे यहां
यह विधान है कि सोते समय ध्यान-
मन्त्र जाप आदि करने चाहियें ताकि संस्कार
उत्तम रहें - उन उत्तम संस्कारों से आप-
स्वप्न में भी ऋषियों के वेदपाठ का ही
शब्द सुनें - अश्लील गानों का नहीं।

इस प्रकार हम साधारण स्वप्नों को
तीन कारणों से बना कर सकते हैं।
(१) बाह्य अनुभव (२) आन्तरिक अनुभव
(३) मन पर पड़े ताज़े और प्रबल संस्कारों
के उद्भव।

जिस प्रकार एक ही प्रकार की ईंटों-
से भिन्न से भिन्न तरह के मकान आदि-
बन जाते हैं एवं एक ही प्रकार के बाह्य-
और आन्तरिक इन्द्रिय जन्य प्रभावों से नाना-
प्रकार के अच्छे बुरे स्वप्न आते हैं - इसकी
विशेष व्याख्या मैं यहां न करने को -
बाधित हूं इसको आप स्वयं सोच-
सकते हैं।

अब शेष एक समस्या रह जाती-
है, वह यह - कि हमें बहुत से सच्चे समा-
चार स्वप्न में मिलते हैं पर क्यों —

आपने सुना होगा कि सच्चे स्वप्न-
प्रायः रात के पिछले भाग में आते हैं।

मैं पहले शयन के पांच भाग कर-
आया हूं - प्रथम तन्द्रा, द्वितीय विश्रम्भ,
तृतीय सुषुप्ति, चतुर्थ स्वप्न, पंचम जागृति।

स्वप्न की अवस्था सुषुप्ति से पहले और
पीछे दोनों समय है - प्रथम अवस्था के-
स्वप्न प्रायः जागृत अवस्था में मन की गति
के अनुसार होते हैं - सुषुप्ति के अनन्तर
वह पहली गति या विक्षेप कम हो जाता-
है - बहुधा नहीं भी होता। इस समय
मन अधिक विशुद्ध होता है - इस अवस्था
में यदि बाहर कोई भाव उपस्थित कर रहा
हो तो उसका प्रभाव शीघ्र होगा।

आजकल परीक्षणों से यह पता लगाया गया है कि विचारों की भी धारायें या किरणें एक स्थान से दूसरे स्थान पर जाती हैं — मैं यदि चाहूं कि बिना पत्रादि लिखे अपने दूर बैठे मित्र को बुलाऊं तो प्रबल विचार से बुला सकता हूं - पं. देवशर्मा जी सुनाया करते हैं कि - एक बार उनके मन में यह विचार आया कि मैं अपने गुरुजी को मिलने जाऊं - उनके इस विचार ने बहुत तंग किया - और वे बिना किसी पत्रादि के आगे चल पड़े जब वहां पंहुचे - उनके गुरु जी ने कहा कि मैं आप को बहुत याद कर रहा था पर पता मालूम न था। इसी प्रकार आपभी को बहुत ऐसे उदाहरण मिलते हैं जिनसे यह विचार प्रचार का सिद्धान्त मानना पड़ता है।

मन बहुत चञ्चल चीज है - साधारणतया मनुष्य का मन किन्हीं परिस्थित बातों में लगा रहता है उनकी प्रबलता के कारण इस प्रकार के दूरगत विचारों को इससे मिलने का अवसर नहीं मिलता। सुषुप्ति के अनन्तर मन कोमल - उन परिस्थित विचारों में व्यग्र होता है कभी२ नहीं भी होता - इन विचारों को मन से मिलने का अवसर मिलता है - इसी से हमें रात्रि के स्वप्नों में बहुत से स्वप्न सत्य होते हैं -

जितना हमारा मन अवस्थित होगा है और शुद्ध होगा - उतना हमें ये सत्य-स्वप्न अधिक आयेंगे अपेक्षा झूठे स्वप्नों के॥

बगुला बना मराल

देखो गति संसार की इसकी अद्भुत चाल।
खाते मछली मत्स्य का बगुला बना मराल॥
बगुला बनी मराल चाल खोटी न छूटी।
दूर कहां से जाय ज्ञान की आंखें फूटीं॥
किये पाप पर जन्म जात जिन रंग लाया।
दाम गया तम, हुआ दुःख, घेरे है माया॥१॥

"रसिक"



नवयुवको !

संसार के प्रत्येक देश के इतिहास के अनुशीलन करने से स्पष्टतया पता चलता है कि उन देशों के अभ्युदय और अधःपतन, उन्नति और अवनति, विकास और ह्रास में तत्कालीन तद्देशीय नवयुवकों का बड़ा भारी हाथ रहता है।

जिस देश के युवक स्वभावतया सदाचारी, परिश्रमी, उद्योगी, और कर्मशील होते हैं उन का अभ्युदय स्वयं सिद्ध है। और जिस देश के युवकों में स्वेच्छाचरण, उच्छृंखलता, निरंकुशता, विलासिता एवं अन्यान्य दोष आजाते हैं उन की अवनति के लिए दैव स्वयं भी कदम बढ़ाता है। इसलिए यदि कोई देश उन्नति करना चाहता है तो उस के युवक उस की औद्योगिक उन्नति तथा कलाकौशल की स्थापना तथा उस की गौरव रक्षा में अपने आप को समर्पण करने के लिए तैयार हो जांय।

भारत के नवयुवक गण! हमारा देश भी भूतल का एक बड़ा भाग है। अतः इसे भी संसार की किसी प्रकार की गति से वञ्चित न रहना चाहिए। भारत के युवक पहले एक अंधकारमय गर्त में गिरे हुए थे। किन्तु समय की गति ने उन को ठोकर लगाई - गढ़े से बाहर निकले आँखें मलकर देखा संसार बहुत आगे निकल गया है। मालूम पड़ा कि आज संसार में जीवित रहना है तो आत्मगौरव और आत्मसम्मान की रक्षा करनी होगी - बिना आत्मगौरव और आत्मसम्मान के जीना मरने से भी बुरा है। जब हमने अन्य राष्ट्रों की उन्नति और गौरव को देखा तो स्पष्टतया मालूम पड़ने लगा कि हमने सर्वस्व गंवा दिया है। स्पष्ट रूप से मालूम पड़ने लगा कि हम परतन्त्र और गुलाम हैं। हृदय तलमला उठा। सबके मन में यह विचार स्वयमेव जागृत हुआ था। इस दासता के बंधनों को किस प्रकार से तोड़ा जाय, इस गुलामी के गर्त से कैसे निकला जाय — कहाँ है वह हमारा राम - कहाँ है कृष्ण - कहां खोये हुए हैं प्रताप और वीर शिवाजी -

इतने में ही एक गगन भेदी आवाज़ ने सब को चौंका दिया। वह बोली हे! भारत के युवको! उठो युवको भार यदि राम को भी वह आवे तो वह भर जाती है उठो होश सम्भालो, राम और कृष्ण तुम्हीं में हैं शिवाजी और वीर प्रताप तुम्हारे ही अन्दर हैं उठो और-

उठो और अपनी अपनी जन्मभूमि के बन्धनों को काट दो। इस पर भी यदि तुम्हारे लिए सबसे बड़ा दुख है, इसी में भय है, उठ जाओ क्या तुम यह सहन कर सकते हो कि कि तुम्हारी महान् जाति अपने राष्ट्रीय मान और राष्ट्रीय अस्तित्व के खेलने के लिये अन्य राष्ट्रों के स्वार्थियों के हाथ जाया करे, तुम किसी के स्वार्थ या बल द्वारा किये गये अन्याय्य निर्णय को स्वीकार करने से पहले उस के बल को तो आज़मा लो। पर याद रक्खो अपनी माता के बंधन काटने से पहले अपने आप के बंधनों को अवश्य काट लेना. नहीं तो सारा प्रयत्न व्यर्थ जायगा. बंधन युक्त हाथ दूसरे के बंधन को कदापि नहीं काट सकता. पहले तुम स्वयं स्वतंत्र हो जाओ, अपनी एक राष्ट्रभाषा बनाओ, तत्पश्चात् स्वराज्य तो अपने आप ही आ जायगा. ज़रा उन जातियों की ओर तो देखो जो पहले बिल्कुल असभ्य और जंगली थीं; जो रहना खाना पीना इत्यादि कुछ भी नहीं जानती थीं पहाड़ों की कंदराओं में जानवरों की तरह छिप कर रह करती थीं आज कल उन्नति पथ पर तुम को कितना पीछे छोड़ गई हैं- आज वे हम को गुलाम कहने में ज़रा भी नहीं हिचकिचातीं। उन को अपने देश का पूर्ण अभिमान है, वह अपनी मातृभूमि के लिए सब कुछ दे देने के लिए तैयार रहती हैं। हम में देश की ममता नहीं रही प्रत्युत स्वतंत्रता और स्वराज्य के प्रेम का लेशमात्र भी नहीं बचा है। हम अपने पूर्वजों की कीर्ति में धब्बा लगा रहे हैं) एक बार अपनी दशा देख कर दुख से भय के साथ आह निकल जाती है सचमुच हम गुलामी की ज़ंजीरों से जकड़े जा चुके हैं। हमारा मनुष्यत्व विदेशीय जातियों से- चला गया है / हमारी आत्मा पवित्र नहीं रही। हृदय में उत्साह नहीं शरीर में शक्ति नहीं. चित्त स्थिर नहीं- बल बुद्धि साहस दूर था. और धर्म तथा कर्म इन्हें सोता देख कभी के विदा हो चुके हैं। साथ साथ अपनी कुरीति की हठ छोड़ी नहीं

जाकर कहीं के हो, पढ़ते हैं तो पुस्तक विदेशीय भाषा. बोलते हैं तो भी वही भाषा. लिखते हैं तो भी वही, सोचते हैं तो भी उसी में- चाल चलते हैं तो भी विदेशीय- तथा स्वदेशीयत्व का ज्ञान किस रास्ते से हो, घृणा करते हैं, तो स्वदेशीयत्व से हम स्पेंसर और मैक्समूलर के सिद्धान्तों को अमल में लाते हैं; मन्त्र जपते हैं तो मैकोले का. कविताएं पढ़ते हैं तो शेक्सपीयर की, उपन्यास पढ़ते हैं तो स्काट के परन्तु इस तरह 32 करोड़ भारतवासी तथा उन के पूर्वजों के विषय में आप कुछ सीखते हैं तो यही कि यह 32 करोड़ भारतवासी जंगली हैं और सदा से दास चले आये हैं इन के पूर्वज भी जंगली थे और सदा गुलाम रहे थे। वेद गधों की बिलबिलाहट हैं, अध्यात्म गडरियों के गीत हैं, शिवाजी डाकू और मक्कार था. रामचन्द्र की कथा सीता वास्तव में कोई नहीं थे. रामायण कपोलकल्पना है। युवक गण! ऐसी अवस्था में आप आप सोचिये किस प्रकार से उन्नति की आशा की जा सकती है? ऐसी अवस्था में स्वराज्य की आशा करना स्वप्न देखना नहीं तो क्या है। उन्नति करने के लिये हम को यह सब बुराइयें जड़ से नष्ट करनी पड़ेंगी, हमें स्वदेशी को इसे अपनी मातृभाषा स्वीकार करनी होगी. अपने पुरातन गौरव को समझने के लिए अपना सच्चा इतिहास पढ़ना होगा- हमें जानना पड़ेगा कि हमारे पूज्य पूर्वजों ने किस प्रकार से आत्मत्याग करके अपनी मातृभूमि की सेवा की थी. किन उपायों से वे इतनी शान्ति से अपना समय बिताते थे, किन उपायों से उन्होंने अपने अपनी जन्मभूमि को स्वर्ग बनाया था - युवको! उठो यह देखो भारत माता तुम्हारी ओर टकटकी लगाये अपने

सारे नवयुवकों से ही अपने उद्धार की आशा कर रही है, जिस प्रकार ग्रीष्म ऋतु में नव बादलों की ओर कृषक आशा भरी नजर से देखता है इसी प्रकार यह ३२ करोड़ भारत जनता भी तुम्हारी ओर आशा भरी नज़र से देख रही है उठो इन की आशाओं को पूरा करने का दृढ़ निश्चय करके उठो, इन आशाओं के पूरा करने में जान देने का निश्चय करके उठो-उठो तुम देश की आवश्यकताओं को तो जानते हो कमर कस लो अवसर बार बार नहीं आते, जिस देश के रुधिर से आप उत्पन्न हुए हैं जिस के अन्न को खाकर आप पुष्ट हुए हैं जिस की कीर्ति में आपकी भी कीर्ति और जिस की अपकीर्ति में आपकी भी अपकीर्ति है उस जन्म भूमि को आपकी आवश्यकता है, आत्म त्याग करके अपने को शीघ्र कृतार्थ कर लो। आप इसे नष्ट होता हुआ देखते होंगे नहीं नहीं आप से इसी आशा-

[illegible] की आज्ञा [illegible] भारत माता के पुत्रो आप के प्रत्यक्ष अवस्था में भारत जननी [illegible] है आप के देखते देखते यह कभी नहीं हो सकता कि ईसाई लोग यहां आवें और अपने स्कूल स्थान स्थान पर खोल कर लोगों पर अंधकार का पर्दा फैलाने का यत्न करें और यहां के निवासियों को गुलामों की तरह मोल लेवें। और आप के देखते ही देखते आपके २५ लाख भाई ईसाई हो जावें, उठो अब सोने की थोड़ी भी गुञ्जायश नहीं है देश को सम्भालो यदि अब विलम्ब कर गये तो अवसर चूक जायगा, और फिर हाथ मलने से कोई भी फल नहीं निकलेगा. उठो अपने असली स्वरूप को समझ कर उठो, तुम्हारी शक्ति अलग नहीं है केवल साहस करने की देरी है अवसर बिल्कुल अनुकूल है केवल कूद पड़ने की ही देरी है।

प्राचीन भारतीय राजाओं का प्रजा के प्रति कर्तव्य ।।

शुक्रनीति के प्रथम अध्याय में शुक्राचार्य जी बतलाते हैं कि राजा प्रत्येक वर्ष कि वह नियुक्त किये हुए प्रजापालक अधिकारियों के गुण विचारे जाने -

ग्रामान् पुराणि देशांश्च स्वयं संवीक्ष्य वत्सरे । कैः अधिकारिगणैः प्रजाः
रञ्जिताः कर्षिताः ॥ ३७४॥
प्रजाभ्यस्तान् साधु वृत्तेन व्यवहारं विचार्य च । [illegible] पक्षपातीश्चात्
प्रजा पक्षं समाचरेत् ॥ ३७५॥
प्रजाशतेन संविष्टं सन्त्यजेदधिकारिणम् । अमात्यमपि संवीक्ष्य
सकृदन्याय गामिनम् ॥ ३७६॥
[illegible] स्वपक्षन्यायवर्तिनं त्यजेत् । अन्यायवर्तिनो
राज्ञां सर्वस्व हरेन्नृपः ॥ ३७७॥

इन में राजा के प्रजा के प्रति क्या कर्तव्य होने चाहिये, यह बताया है -

राजा को चाहिये कि प्रतिवर्ष ग्राम और नगर (provinces or districts) स्वयं जाकर घूमकर देखे और पता लगावे कि अधिकारियों से कितनी प्रजा संतुष्ट है और कितनी खिन्न या दुःखी है । उनका पता लगाकर सत्य और न्याय पूर्वक उनका विवेचन करे ।

इस उपर्युक्त उल्लेख में राजा को अन्यायी अधिकारी का पक्ष कभी भी समर्थन नहीं करना चाहिये अपितु प्रजा के स्वार्थ को देखना चाहिये [illegible]

आर्य सिद्धान्त

हितों का ख्याल करना चाहिये॥ अगर प्रजा में से १०० आदमी भी किसी अधिकारी के विरुद्ध जावें तो राजा को बिना सोचे विचारे उस अधिकारी को बरखास्त कर देना चाहिये॥ राज मंत्री का भी निरीक्षण करे अगर वह भी अन्यायपूर्ण चाल चलन रखता हो तो उसे अदालत में लाकर दण्ड दे अगर फिर भी वह न माने तो उसे फौरन उसके पद से च्युत कर दे। और इस प्रकार से अन्याय से आजीविका करने वाले अधिकारियों के अधिकारों को राजा छीन ले और उनका सर्वस्व हरण करले। सो आपने देखा कि आचार्य [illegible] कितने प्रजा के हितेच्छुक हैं वह अधिकारियों की कोई सत्ता भी नहीं मानते हैं अपितु उनको प्रजा का भृत्य या सेवक ही मानते हैं-

चीन के प्रसिद्ध धर्म Confucious धर्म के प्रवर्तक Confucious ने इस बारे में निम्न शब्द कहे हैं- "सर्वशक्तिमान परमात्मा ने सबसे नीचे मनुष्य को भी moral sense या Concious दी है जिससे स्वाभाविक तौर से वह राज्य में अपना अधिकार बताता है" इस से यह सिद्ध होता है कि मनुष्य स्वाभाविक तौर से अपने को राज्य का अंग समझता है और राज्य में एक अधिकारी के समान ही अपना अधिकार समझता है। शुक्राचार्य जी इस बारे में राजा को कहते हैं-

राज्ञो नीतिहीनानां यथापरा-
धिनां सदा॥ शत्रवः वै विजायन्ते-
लोके मर्त्यान मर्त्यवत्॥
उपरम्य परतो धर्मः प्रजानां देहि-

पालनः । दुष्ट निग्रहणं नित्यं न
नीत्या ते विना ध्रुवं ॥

जैसे कुपथ्य आदि अन्नों के सेवन से रोग
को प्राप्त होते हैं वैसे ही नीति सेवी-
न राजा के शत्रु थोड़े समय में ही
बढ़ जाते हैं। और जैसे सुपथ्य-
आदि अन्नों के सेवन का रस प्राप्त होजा-
ता है वैसे ही नीतिपरायण राजा के शत्रु
जल्दी क्षय को प्राप्त हो जाते हैं।

राजा का धर्म है कि वह [illegible]
[illegible] से ~~[illegible]~~ और दण्ड करे
और Offenders को दण्ड देकर
प्रजा की रक्षा करे। पर यह दोनों कार्य
नीति पर ही आश्रित हैं। और
बिना नीति के यह दोनों कार्य राजा
नहीं कर सकता है॥

इससे सिद्ध होता है कि कोई भी
राष्ट्र नीति के बगैर नहीं चल स-
कता है अतः अब राष्ट्र के लोगों को
यह एक सरल formula [illegible]

[illegible]
1. [illegible] (नीति) [illegible]

आगे आचार्य शुक्र बतलाते हैं-
नीतिं त्यक्त्वा वर्तते यः स्वतन्त्रः
स हि दुःख भाक् (स्वतन्त्र प्रवृत्ते-
[illegible] धारावलिः ॥ १६
अवश्य हितकरं सर्व राष्ट्रे [illegible]
[illegible] नीति [illegible]
[illegible] हितावहे ॥ १८ ॥
[illegible] राष्ट्रं [illegible]
[illegible] । [illegible]
[illegible] नीति [illegible]

जो राजा नीति को छोड़कर स्वे-
च्छा [illegible] व्यवहार करता है वह
दुःख का भाजन बनता है। और
जो सेवक या प्रजा ऐसे राजा की
सेवा करती है वह उसके पाप की
भागी [illegible] बनती है अतः
शीघ्र ही [illegible] को प्राप्त होती है।
राजा को अपने हित के लिये-

नीति से प्रयोग करना चाहिये कि जिससे प्रजा से स्नेह रहे तथा हितकारी बने। अर्थात् प्रजा के लिये वह अपने को उपस्थित करे तथा कानून आदि अपनी मरजी से न चलाता जावे।

जो राजा अनीति करके ठगता है वह अपने राज्य को बहुत काल तक स्थिर नहीं रख सकता है। क्यों कि उसका राष्ट्र भिन्न हो जाता है उसकी सेना भिन्न हो जाती है और अमात्यादि गण तथा पारिषदें भी भिन्न प्रकृति वाली हो जाती हैं और इस प्रकार भी पारस्परिक [illegible] से वह राज्य जल्दी पतित होता हो जाता है।

[illegible] प्रजा दण्डके [illegible] [illegible] नृपैः [illegible] ॥११८॥

अर्थात् अपनी प्रजा के [illegible]र राजाओं को भी ऐसे नहीं करना चाहिये। अगर उसने प्रजा पर बिना विचारे तथा अन्याय से शोषण किया तो आचार्य [illegible] कहते हैं कि उसका शीघ्र ही पतन हो जाता है और वह शीघ्र अपने अधिकार से च्युत किया जाता है।

अरक्षितारं नृपतिं ब्राह्मणं चानधीयानम्। [illegible] [illegible] ॥१२१॥

[illegible] [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] ॥

[illegible] [illegible] [illegible] [illegible] ॥

[illegible] [illegible] प्रजाभ्यः [illegible] पालनम्। [illegible] राजसूयादेः [illegible] [illegible] ॥

तारे

१

देखते हैं नित चमकते व्योम में तारे सभी
किन्तु सोचा आप ने क्या? कौन तारे हैं कभी।
स्वर्गगङ्गा में खिले ये सित कमल हैं हँस रहे
फेनलेखा बह रही क्या? सिन्धु उस के बीच रह ॥

\+ + + +

२

सूखता परिधान किस का फूल हैं जिस पर कढ़े
शामियाना इन्दु का क्या लैम्प बिजली के जड़े।
फूल ये मन्दार के क्या स्वर्ग में हैं खिल रहे
देवपति के क्या नयन ये हैं हज़ारों दिख रहे ॥

\+ + + +

३

मोतियों का हार किस का आन बिखरा व्योम में
पुण्य चमके क्या हमारे पाप के तम लोम में।
देवबाला क्या जलाती दीप घी के स्वर्ग में
पितर बैठे देखते हैं कर्म सब के स्वर्ग में ॥

\+ + + +

५

अप्सराएं स्वर्ग में क्या - फुलझड़ियां छोड़ती
कुन्द के उस झाड़ में क्या कुन्दकलियां उछलती।
जलधि के गम्भीर तल में सीप में मोती खिले
चमकते खद्योत तम में, फूल रत्नों के खिले॥

यह कौन ?

१

इस घनघोर निशा काली में ताका करता है यह कौन ?
छिप कर कोई देख रहा है है कोई यह मौन।
झटपट बोल, अनन्त नयन से करता क्यों तारों का व्याज
विपद दृश्यों देख हमारे क्यों हंसता क्यों करता है नाज़
हंस कर मौज उड़ा ले नटखट, जो कोई देता हूं शाबाश
यह कर याद सूर्य का जो तब नयनन का कर देगा नाश॥

नास्तिकवाद।

२

आइये अब, नास्तिकवाद पर बुद्धि, ज्ञान तथा सदाचार के महत्वपूर्णों से विचार करें।

प्रश्न स्वाभाविक तथा स्पष्ट है कि क्या नास्तिकवाद बुद्धि को सन्तुष्ट कर सकता है? हम जिस विशाल संसार में निवास करते हैं उसका प्रत्येक पदार्थ - नहीं अति-नियम तथा क्रम में बंधा हुआ कार्य कर रहा है। अस्तु, नास्तिकवाद से इस विलक्षण नियम तथा क्रम की समस्या का प्रश्न किया जाता है। इस पर एक प्रकार के नास्तिकवाद का कथन है कि इस समस्या का कोई हल नहीं, और वास्तव में इस प्रकार का कोई प्रश्न करना ही सरासर मूर्खता है। परन्तु यह कोई समाधानजनक उत्तर नहीं। यह स्वाभाविकतया मनुष्य प्रकृति में विद्यमान कारणकार्यभाव द्वारा कारणकार्यभाव तक पहुंचने की उत्कण्ठा को बीच में ही नष्ट कर देता है। एवं यदि यह अपने कथन में सफल रहना चाहे तो इसे अपने आप सब प्रकार की जिज्ञासा नष्ट करते हुए संसार भर में से प्रत्येक प्रकार की जिज्ञासा प्रवृत्ति को नष्ट करने का प्रयत्न करना चाहिये। अस्तु।

एक और नास्तिकवाद है। इसका कथन है कि वर्तमान संसार को संसारों की अनादि कारणकार्य-शृंखला का अन्तिम कार्य मानने पर किसी आदिकारण के मानने की आवश्यकता नहीं रहती। परन्तु मन की इस उपर्युक्त सिद्धान्त से कदापि सन्तुष्टि नहीं हो सकती। वह संसारों की, कि इस प्रकार की किसी शृंखला को मानने के लिये तय्यार नहीं जिसके कि आदि में इसकी आधारभूत कोई

कड़ी नहीं है। यह शृङ्खला की कड़ियों को अपरिमित तो मान सकता है अनादि नहीं। इस प्रकार तार्किक दृष्टि से बिना आदि अवस्था के संसारों की शृङ्खला को मानना नितान्त असंगत तथा व्यर्थ है। इसके अतिरिक्त यदि संसारों की कड़ियों की अनादिता को मान भी लिया जाय तो भी क्रम, प्राकृतिक तथा ऐन्द्रिक पदार्थों की संघटना आदि की व्याख्या के लिये किसी कार्यकर्त्री बुद्धि की सत्ता का मानना अत्यावश्यक ही है। जिस प्रकार आगरे के ताजमहल के निर्माण का कालनिर्णय उसके बुद्धिमान् कारीगरों के हस्तलाघव या सत्ता का निषेध नहीं करता उसी प्रकार एक संसार या संसारों की शृङ्खला को अनादि मान लेने से उनको

सुव्यवस्था देनेवाली बुद्धि का निषेध नहीं कर सकता। इस प्रकार कुछ नास्तिकों का संसार को अनादि मानकर परमात्मा की सत्ता से निषेध करना अत्यन्त हास्यास्पद है।

एक और नास्तिकवाद है। इसका कहना है कि प्रकृति तथा उसके नियम सांसारिक समता, उपयोगिता एवं मानवीय गुणों तथा आकांक्षाओं की व्याख्या कर सकते हैं। परन्तु यह नास्तिकवाद बहुतप्रिय (Popular) होते हुए भी अपनी स्थापना को सिद्ध करने में नाकामयाब सिद्ध हुआ है। यह आज तक सिद्ध नहीं कर सका कि प्रकृति तथा उसके नियम स्वयंसिद्ध हैं अर्थात् उनका कोई भी कारण नहीं है। इस प्रकार उपर्युक्त नास्तिकवाद के मानने वाले विद्वानों की स्थापना ही साध्यसम

है।

एक और नास्तिकवाद है। इसका कहना है कि यह संसार तथा इसके सम्पूर्ण पदार्थ और नियम मनुष्य के मानसिक परिणाम हैं। अर्थात् संसार में जो कुछ भी पञ्च ज्ञानेन्द्रियों द्वारा अनुभव होता है वह सबका सब मानसिक अवस्थाओं का ही रूपान्तर है। एवं हमारा अपना आत्मा ही अपने विलक्षण गुणों द्वारा अनात्म वस्तुओं को उत्पन्न करता है। यही कारण है कि इस प्रकार के सिद्धान्तों के कारण यह नास्तिकवाद कभी कभी स्वयं-प्रभुवाद (Autotheism) के नाम से भी पुकारा जाता है। महाशय शोपनहार तथा उनके कुछ अनुयायी स्पष्ट शब्दों में मन या दिमाग में ही सम्पूर्ण देशकालावच्छिन्न पदार्थों की सत्ता को मानते हैं। शायद इसीलिये उनके पीछे आनेवाले बजोल्ले (Bylle ?) तथा मेहरनेग (Mehrneg ?) आदि जर्मन विद्वानों ने माना है कि दिमाग का बाह्य स्वरूप वास्तव में सारे संसार को आच्छादित करने वाले एक वृहत् दिमाग का ही स्थूलाभासित्व प्रतिबिम्ब है। इस प्रकार ऐसा सिद्धान्त जो कि स्वाभिक भ्रम का कारण अनेक प्रकार की अश्लील कल्पनाओं को अवसर देता है अपने आप ही अपना खण्डन करता है।

इस प्रकार उपर्युक्त विवेचना से स्पष्ट हो गया होगा कि कुछ नास्तिकवाद का उसके किसी भी स्वरूप में समर्थन नहीं कर सकती। अब विचारना चाहिये कि क्या नास्तिकवाद हृदय को सन्तुष्ट कर सकता है?

नास्तिक ईश्वर में विश्वास नहीं करते अतः एवं उनके लिये केवल मात्र जगत की ही सत्ता है। प्रश्न स्वाभाविकतया उत्पन्न होता है कि क्या कभी संसार परमात्मा के बिना भी हृदय को मनुष्य कर सकता है? हमारी संमति में परिष्कृत मति का कोई भी आदमी ऐसा नहीं हो सकता जो कि अपने अनुभव से स्वीकार कर सके कि मानवीय हृदय केवलमात्र खान, पान, सम्पत्ति, मर्यादा, सन्तान, सम्मान तथा आमोद-विहार से ही सन्तुष्ट हो सकता है। अतएव नास्तिकों पर दोष सांसारिकता का दोष लगाना नितान्त अनुचित, अन्याय तथा अपमान जनक है।

इस प्रकार परमात्मा के अभाव में नास्तिक लोग सिर्फ सत्य, सुन्दरता, पवित्रता, दयालुता तथा सौहार्द आदि व्यक्ति तथा समाज को उन्नत बनाने वाले गुणों को ही हृदय की उच्च भावनाओं के केन्द्र के रूप में प्रकट कर सकते हैं। वास्तव में इन उच्च भावनाओं को सांसारिकता के रंग में रंग कर दिखाना दिखाने वाले तथा देखने वाले दोनों के लिये बहुत ही भला प्रतीत होता है। आइये अब इन उपरोक्त गुणों पर भी सूक्ष्म भाव से विचार करें कि आया ये परमात्मा के विश्वास के अभाव में भी मानवीय हृदय को सन्तुष्ट कर सकते या संसार का कुछ भला कर सकते हैं या नहीं।

शिक्षा की सफलता का रहस्य

एक बुढ़िया अपने बच्चे को लेकर एक महात्मा के पास गई और कहा कि बच्चा रोगी रहता है, मीठा खाने की बहुत आदत है, जहां कहीं से मिलता है मीठा ले आता है, इस कारण इस के दांत भी खराब हो गये हैं। महात्मन्! कोई उपाय बतलाइए और बच्चे को शिक्षा दीजिये ताकि इसकी यह बुरी आदत छूट सके। महात्मा ने कहा माता, आज से बारहवें दिन आना। वह माता बारह दिन के बाद बच्चे को लेकर फिर आई। महात्मा ने बच्चे की ओर अच्छी तरह से देखा और उसका हाथ अपनी ओर आकर्षित करते हुए कहने लगे "पुत्र, मीठा अधिक खाना अच्छा नहीं। अधिक मीठे से बहुत सी हानियां हुआ करती हैं। तुम मीठा न खाया करो।" तदनन्तर बुढ़िया माता को कहा- इसे ले जाओ मैंने शिक्षा दे दी है। बुढ़िया ने हाथ जोड़कर धन्यवाद देते हुए कहा कि मैं एक बात पूछना चाहती हूं कि आप ने उस दिन यह शिक्षा क्यों न दे दी? महात्मा ने जवाब दिया कि उस दिन मैं स्वयं मीठा खा चुका था। मेरे कहने का असर न पड़ता। अब मैंने बारह दिन तक मीठा छोड़कर अपने को इस उपदेश के देने का पूर्ण अधिकारी बना लिया है।

इस छोटी सी कथा में एक बहुत बड़े सिद्धान्त - एक महत्वशाली रहस्य की विवेचना की गई है। इसमें जिस सिद्धान्त की विवेचना की गई है, यदि उस पर हम ध्यान मनन करें तो वर्तमान शिक्षा जगत की एक बड़ी समस्या हल हो सकती है।

आज कल शिक्षा शास्त्रियों के सामने एक अत्यन्त कठिन प्रश्न उपस्थित हुआ है कि विद्यार्थी जीवन में शिक्षा प्राप्त कर के भी कोई विद्यार्थी नम्र नहीं बनता जिसे प्रशंसनीय कहा जा सके। एक दीर्घ काल तक भी किसी विश्वविद्यालय में रह कर भी विद्यार्थी

उस सम्पदा को नहीं सीखता। आज कल हमारे गुरुकुल पर विचार करने वाले लोगों के दिलों में भी यह प्रश्न विशेषतः उठता है। वे कहते हैं कि- चौदह सालों तक गुरुकुल के पवित्र वायुमण्डल में निवास कर के नियमित जीवन व्यतीत कर के भी वे वैसे नहीं निकलते जो कि इतने काल में निकल सकते हैं। चौदह साल तक विद्यार्थी प्रति सन्ध्या हवन करते हैं प्रातःकाल चार बजे उठते हैं परन्तु यह इन के जीवन में प्रविष्ट नहीं होतीं। विद्यार्थी चौदह साल तक आर्य सामाजिक वातावरण में रहते हैं परन्तु उन्हें आर्यसमाज के प्रति उचित प्रेम नहीं होता।

इन सब प्रश्नों का उत्तर यदि जानना हो तो उपर्युक्त कथा पर गम्भीर दृष्टि डालिये। उत्तर स्पष्ट मिलेगा।

मनुष्य जिन परिस्थितियों में रहता है उन से प्रभावित हुए बिना नहीं रह सकता। सम्भव है कि एक विद्यार्थी के माता-पिता सुचरित्र हों परन्तु उस के पड़ोसियों का असर ही विद्यार्थियों के बिगाड़ने के लिये पर्याप्त है। इसीलिए गुरुकुल खोलने का हमारे पूर्वजों ने नगरों से वर्जित दूर शिक्षणालयों के बनाने की प्रथा डाली है।

मनुष्य एक चेतन पदार्थ है, उस पर बाह्य परिस्थितियों का असर उतना नहीं पड़ता जितना सामाजिक परिस्थितियों का। विद्वानों का मत है कि यदि माता-पिता कुचरित्र भी हों तो भी उन को बच्चे के सामने कोई कुचेष्टा न करनी चाहिये। इस से बच्चे का दिल साफ रहेगा उसमें किसी प्रकार का विकार न आवेगा। परन्तु यह मत ठीक नहीं। मनुष्य जड़ पदार्थ नहीं उसमें आत्मा है उस पर इन की कुचेष्टाओं का असर ही होता है काफी असर पड़ता है चाहे उन ने उस समय तक माता-पिता की किसी भी बुरी चेष्टा को न देखा हो। यही कारण है कि हमारे यहां सार्वजनिक और वैयक्तिक जीवन को पृथक् नहीं किया गया। इसने [illegible] महापुरुष के चरित्र जानने का साधन [illegible]

नहीं था, परन्तु मालूम जानता था कि ऐसी अवस्था में भी उस के उपदेश का असर नहीं पड़ेगा।

इसलिये हमें इस प्रश्न को हल करते समय इस सत्य सिद्धान्त को अवश्य ध्यान में रखना चाहिये। कुछ और सिद्धान्त भी हैं जो हमें इस प्रश्न को सुलझाने में सहायक होंगे। उनमें से इस समय केवल एक सिद्धान्त का ही लेंगे।

मनुष्य का मन बुरी बातों की ओर अच्छी बातों की अपेक्षा ज़्यादा झुकता है ऐसा मनोवैज्ञानिकों का सिद्धान्त है। यदि एक विद्यार्थी को दो समान प्रकार के गुरुओं - एक सुचरित्र और एक दुश्चरित्र के पास समान काल तक रखा जाय तो यह निश्चित है कि विद्यार्थी बुरी बातें जल्दी सीख लेगा। एक मानसिक सत्य को हम इस सिद्धान्त में पाते हैं।

इस बच्चे का चित्त दर्पण के समान होता है। उस पर जिस वस्तु का प्रतिबिम्ब पड़ता है वैसी ही छवि उस के अन्दर से दीखती। बुराई सरल है अपेक्षा भलाई के। इसलिये किसी शिक्षालय में दो एक बुरे लड़कों के साथ से उन विद्यार्थियों से सुशील [illegible] सच्चरित्र बनने की आशा करना अति कठिन काम है।

हमें उक्त प्रश्न को विचारते हुये इस सत्य की उपेक्षा नहीं करनी चाहिये। उपेक्षा करने से हम कभी भी इस कठिन प्रश्न को सरल नहीं कर सकते।

बाढ़

१

देख तेरे कारनामे दिल के टुकड़े होगए।
हाय गङ्गे! पाप हमसे कौन ऐसे होगए॥

२

जिन गरीबाना घरों में, सैंकड़ों बालक पले।
रह गए दो चार, पर वे, शान अपनी खोगए॥

३

दिलजलों का हाल देखो। कुछ कहा जाता नहीं।
गिरते २ अब जमीं में लापता वे होगए॥

४

खेल के मैदान देखो कुछ जिनके नील दुकूल थे।
रेत का ओढ़ कफ़न है, और बेसुध सोगए॥

५

मातु गङ्गे। धेनुमाता ने ये कैसा उद्यत।
उनके बछड़े साथ उनके मरते २ होगए॥

६

लाल कुल के लाल नयनों, से ये हालत देखकर।
देवि के चरणों को फिर से अश्रुजल से धोगए॥

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मन।

खूब दौड़ा। खूब दौड़ा। वाह भाई खूब दौड़ा। बार २ यही याद आता है खूब दौड़ा। ऐसी सरपट दौड़ लगाई कि जाते कि स क्षण सातों समुद्र पार होगया। मार गया, मार गया बाजी। क्या कि सायत में भी इतना तेज़ दौड़ने वाला कोई घोड़ा है। घोड़ा क्या, हवाई जहाज़ भी इस के सामने दम हार गये। शाबाश! शाबाश!! खूब रहे। अब तुम्हारे से कौन बड़ा चढ़ा है। घर बैठे २ ही तुम्हारी मदद से सब काम कर लूंगा। रेलगाड़ी में क्या खर्च करना है। खूब दौड़ो, खूब दौड़ो; जितना दौड़ सकते हो दौड़ो। देखते हैं कौन तुम्हारे मुकाबिले में ठहरता है। अच्छा भाई, कलकत्ता जाकर तो दिखलाओ। ओह! यह क्या, तुम तो मेरे कहने से पहले ही कलकत्ते भागे गये, अब की नहीं। दोबारा दौड़ लगाओ। परन्तु शर्त यही है—मेरे कहने पर। अच्छा, लो, एक, दो, तीन। नहीं, नहीं.... यह तो तुमने फिर नहीं किया। मेरे कहने पर तो चलते नहीं।

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तुम्हारे कहने पर तो दौड़ा था। यह तो मेरी खूबी है कि कहने से पेश्तर जहां कहो हाज़िर होजाता हूं। मेरी तेज़ी के कारण ही इतना मालूम पड़ता है।

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अच्छा माना तुम ठीक कहते हो। तुम्हारी चाल ही इतनी अधिक है कि मापी नहीं जा सकती। तब तुम सच मुच बाजी मार गये। अच्छा जाओ। रस्किन का सन्देश ले आओ।

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ओह! अब तक नहीं आये, क्या बात है। अब इतनी देरी क्यों लगा दी। अच्छा, इन्तज़ार ही करें। देखते हैं, कब लौटता है।

'अच्छा, आगये। बड़ी देर लगा दी। हां, तो फिर क्या सन्देश लाये हो। सुनाओ तो सही।

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अच्छा, अबतक कलकत्तेके आलीशान मकान तथा ट्रामों के पीछे ही देखते रहे। क्या विद्यार्थियों के दल तथा वहां के पार्कों के देखने में तुमने सारा समय बिता दिया। हमने तो रस्किन का सन्देश लाने भेजा था और तुम कलकत्ते में चक्कर मारते रहे। क्यों, क्या भूल गये थे। अच्छा, जाओ, फिर जाओ, इस बार रस्किन का सन्देश ज़रूर लाना। भूलना मत।

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न जाने इतनी देरी कहां होगई। इसबार तो पूरी तरह से याद दिला कर भेजा था। कहीं कलकत्ता तो नहीं चला गया। क्यों वह कलकत्ता का बड़ा शौकीन नज़र आता है। नहीं; ऐसा नहीं हो सकता है। वह तो आज्ञा-पालक है। पिछली बार तो वह भूल गया था। अब की तो याद करा के भेजा था। न जाने कहां लापता होगया है। देखें कब आता है।

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क्यों भाई! कहां गये थे। बोलते क्यों नहीं। हैं! क्या बम्बई चले गये थे। वहां के बाज़ारों में चक्कर लगा रहे थे। वहां जाने को तुम से किसने कहा था। अपना काम भूल गये थे। यदि नहीं भूले थे तो क्यों नहीं गये। बस इतना जानलो - कि तुम्हारी मर्ज़ी बम्बई की सैर करने की थी। तुम बड़े नालायक निकले। तुम जैसा नटखट मैंने कभी नहीं देखा। तुम भी खूब रहे- जो आप कर बैठे। किसी की सुनते भी तो नहीं हो। अपने मालिक से पूछ तो लिया करो। हम आवाज़ें मारते 2 थक जाते हैं तुम्हारी दो तोला ज़बान टस से मस नहीं होती। न जाने सारा दिन कहां आवारा गर्दों की तरह फिरा करते हो। किस काम के लिये बुलाना चाहता हूं तो झट कहीं दौड़ जाते हो। पलट कर आने पर आंख चूकते फिर कहीं गायब हो जाते हो। तुम्हें एक बार फिर चेतावनी दे देता हूं। आगे से मैं एक नहीं सहने का। हमने तुम्हें इधर उधर बहुत चक्कर

लगाते देखता है। कभी गंगा में गोते मार रहे होते हो तो फिर कभी मुलतान, कलकत्ते और बम्बई की सैर करते चले जाते हो। आवाजें देने पर भी अनसुनी करके उसी में मशगूल रहते हो। न जाने तुम्हें किसने यही बुरी आदत डलवा दी है।

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तुम भी अच्छे रहे। पहले शाबाश देते रहे। जब हम उस में मजा लेने लगे तो तब त्योरियां चढ़ाते हो। तुम्हीं तो शुरू २ में कलकत्ता और बम्बई भेजा करते थे। जब मैं एक दम पहुंच जाता था तब तुम्हीं तो होते थे जो प्रशंसा के पुल बांधा किया करते थे। जब हमने तुमसे सलाह लेनी बन्द करदी तो गुस्सा किया। यह कोई नीति है। हम तो जो जी में आएगा करेंगे। अब तो तुम्हारी एक भी नहीं सुननी। हम कोई तुम्हारे गुलाम थोड़े ही हैं कि जब होंका मारो हाथ जोड़कर सामने आ खड़े हों। दासता का जमाना अब जाता रहा। फिर कभी ऐसी भूल न करना। मेरी सहायता के लिए तो सारा यूरोप तथा अमरीका तैयार है। इस काम में तो एशिया भी मेरी मदद करेगा। कुछ ताकत हो तो कर दिखाओ। वैसे तो बड़ी २ मारते हो तुम्हारे से होना कुछ नहीं। 'फिर पछताए होत क्या, जब चिड़िया चुग गई खेत।' पहले तो मौज की नींद लूटते रहे। अब देखो तो सही वश में होने को कहता है। अब तो मैं तुम्हें अपनी नाच नचाऊंगा। देखता हूँ कौन बाजी मारता है। सुरसा का नाम लेकर मुझे डराना चाहते हो। याद है हनुमान उस से भी साफ २ बच गया था। मशक का आकार धरकर हनुमान ने कैसी चालाकी दिखाई थी। मैं तो पवनसुत का दादा हूं। पवन मेरा ही लड़का है। शीलगोल होने से कुछ नहीं बनता। लम्बा चौड़ा हाथी भी त्रिशूल को कहां मानता है। तेरी मेरे सामने दाल क्या गल सकती है। खबरदार, कभी मुझे वश में करने का नाम भी लिया।

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[एकान्त में]

(हथेली पर सिर रख कर)

हाय! अपनी जिन्दगी तबाह कर दी। किस बदमाश के फेरे से पाला पड़ा। सिर पर चढ़ाने का यही फल है। वशिष्ठ महाराज जी का कहना ठीक निकला। इसको पहले से ही लगाम से बांधे रखता तो ठीक होता और ऐसी बातें आज न सुननी पड़तीं। क्या करूं-कुछ सूझता नहीं। सिधि की गई सारी। अब तो यह हाथ से जाता रहा। परन्तु अकेला रहना भी तो दुष्कर प्रतीत होता है। यदि परमेश्वर मनुष्य को बिना इस धूर्त मन के रहने का मार्ग दिखा देता तो मैं कभी इस बदमाश का मुंह भी न देखता। परन्तु क्या किया जाय इसके बिना तो एक क्षण भी रहना मुश्किल है। आखिर कुछ करना ही पड़ेगा। (कमर कसकर) ओह! यह भी कोई कठिन बात है। इतनी जल्दी निराश क्यों हो गया। इसे अभी पकड़ लाता हूं। अब की मैं एक क्षण के लिए भी न छोड़ूंगा। इसने काफी तंग कर लिया। मैं इसकी करतूत कभी नहीं भूलने का। कोई कितना ही शोर मचावे मैं इसे पकड़ लाऊंगा।

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चल कहीं के धूर्त, नालायक! तेरे जैसा मैंने कोई कृतघ्न नहीं देखा। मैं तुझे नहीं छोड़ने का। अब तुझे बांध कर रखूंगा देखें कहाँ जाता है। स्वतन्त्रता का तूने यही फल दिया। अब तक तुम्हारा बहुत लिहाज किया पर तुम तो मधु से लिपटे हुए विष पात्र निकले। न कलंक का मेरे गाना बजाना। हृदय की कोठरी में बन्द रखूंगा।

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जी हुजूर। जो आज्ञा। गुस्ताखी माफ हो, मुझे होश न थी। मैं पागलपने में ही सब बकवाद कर रहा था। मुझे क्षमा कीजिए।

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कैसा दबाया। अब कुछ अक्ल आयी है। जब से इसे काबू किया है सब शान्ति है। कोई झगड़ा न हो। सब आनन्द ही आनन्द है। जीवन का यही अमृत रस है। यदि सारा संसार ही इसी तरह करने लग जाय तो संसार का क्या ही भला हो। आज से मैं इसी का उपदेश करूंगा "भाइयो! मन को वश में करो। नहीं तो यह मन तुम्हें इधर उधर भटकाता रहेगा।" इति.

भारत के प्राचीन बनों का सन्देश.

(लेखक - श्रीयुत [illegible])

प्रिय पाठक गण ! आज आप विजय वैजयन्ती की धूम में मस्त हैं। शत्रुओं के रहने वाले अपने वीर नायक की खुशी को मनाने में लगे हुए हैं। पर पराधीन जाति के लिये ऐसी खुशियों का मनाना कहाँ तक ठीक है इसके लिये अधिक कहना फिजूल है।

जिस प्रकार एक तमाशा दिखाने वाला पालतू शेर या बन्दर को सोने की जंजीर से [illegible] उससे खुशी को मनवाता है इसी प्रकार परतन्त्र वह जाति [illegible] पराधीन होकर अपना निज का सब मनाना बन्द करा देती है। परन्तु जो जाति इस अपने प्राचीन स्वच्छन्द विहार की उमंगों को भूल जाती है जिनकी स्मृति शक्ति इतनी मन्द हो गई है कि वे अपनी अनुभूतियों को याद नहीं कर सकते जिनके कान इतने मन्द हो गये हैं कि वे महापर्वतों के नादों को भी नहीं सुन सकते निश्चय है वैसी जाति या देश जन समाज श्वास लेते हुए भी मृत समान है।

परन्तु आज हमारा सौभाग्य है कि हमारा देश इतना अशक्त और निस्तेज नहीं हुआ है। हमारा देश अब भी अचेतन [illegible] प्राचीन देवों की वाणियों या सन्देशों को सुन सकता है। जाति के प्राचीन वीरों की [illegible] अब भी उनके मन्द हृदय में ज्योति जगा सकती है। आज भी भारत जाति के वीर हनुमान के नाम से [illegible] पाठ के नाले को [illegible] में [illegible] कर सकते हैं। रामचन्द्र के पवित्र नाम से आज भी हजारों [illegible] सत्य या धर्म के लिये अपने [illegible] भोगों को तिलांजलि दे सकते हैं। इन प्राचीन [illegible] का हमारे देश में [illegible] रहा है उसी को हम आज आपके सामने रखने के लिये आये हैं। भारतीय प्राचीन वैदिक सभ्यता के मूल स्थान भारत के प्राचीन जंगल हैं। प्राचीन भारत के गुरुकुलों [illegible] शिक्षणालयों के ये आधार भूत थे। ऋषि लोग इन्हीं जंगलों में आत्मिक [illegible] का मनन और अभ्यास करते तथा सात्विक आनन्द लेते थे। इसी प्रकार राजा लोग राजकुमारों को भी [illegible] के साथ [illegible] इन्हीं जंगलों में [illegible] था। [illegible] सबको इन पवित्र स्वच्छन्द जंगलों में [illegible] करना पड़ता था — [illegible] जंगल [illegible] के [illegible]। [illegible] जीवन रहते थे — इस [illegible] के [illegible] के कारण इन जंगलों में अत्याचारियों का सर्वथा [illegible] था। जिस प्रकार [illegible] के पास [illegible] रखने का साहस नहीं होता [illegible] परिस्थितियों के दैवीय जंगलों में [illegible] सात्विक [illegible] के [illegible] को [illegible] था [illegible] लिये इसका [illegible] नहीं है। इसी प्रकार [illegible] के स्वामियों पर अत्याचार किये उसको भी [illegible] का अनुभव करना पड़ा।

महाभारत के समय वनवासी पाण्डवों पर दुर्योधन ने अत्याचार करने का निश्चय किया - जिसके लिये इस [illegible] देकर [illegible] था। और [illegible] के उन [illegible] परीक्षित का [illegible] से [illegible] नहीं है [illegible] के [illegible] में [illegible] का परिणाम में उनका आत्म नाश हुआ।

पाठक वृन्द ! भारतीय इतिहास के इस पावन घटना चक्र के अभिप्राय को ध्यान में रख कर ही हम आपके सामने कुछ कह सकेंगे। [illegible]

करते हुए अपने निपुण भाइयों से सह-
योग करना चाहिये। हम बनवासियों
को तो ऐसी मनानी चाहिये कि आज सारे
देश में यह भाव फिर जाग्रत हो रहे हैं।

इन जंगलों का आश्रय लिये बि-
ना सच्चे गम्भीर त्यागी विचारक नहीं
मिल सकते - यदि स्वतन्त्रता प्राप्त कर-
नी है तो हम सबको इन्हीं का आश्रय
लेना होगा। भारतीय वीर छत्रपति
शिवाजी ने इन्हीं में अभ्यास किया था-
संसार के सुधारक वर्तमान भारत के पि-
ता दयानन्द ने भी इन्हीं का आश्रय लि-
या था- इसलिये आइये, आज ज़रा
भर गम्भीर होकर जंगलों के प्राचीन
मधुर मन्त्रनाद को सुनकर मनन करें।
मधुर मन्त्रनाद को सुनकर ही आज के ना-
यक राम के धनुष की टंकार का साक्षा-
त्कार कर सकेंगे

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४ इसके पुर्ज़े ऐसे होने चाहियें जो जहां तक सम्भव हो स्वदेशी चीज़ से बनाये जायें

५ एक मामूली दर्जे का देहाती मिस्त्री इसकी मरम्मत कर सके

नोट इस सम्बन्ध में यह भी कह देना आवश्यक है कि ऐसे बेलन के बनाने वाले को पारितोषिक के अतिरिक्त बेलन का मूल्य भी दे दिया जायगा॥

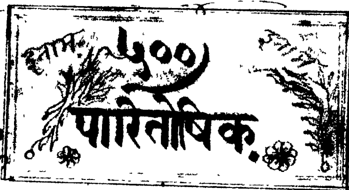
लाहौर में खड्डियों का कारखाना —

खड्डियों बनाने का कारखाना गणपत बाज़ार लाहौर में खुला है जो महाशय सीखना चाहें उन्हें सिखाया भी जा सकता है। इसके ३ विभाग किये गये हैं (१) वह महाशय जो सीख कर अपना काम करना चाहें। (२) जो सीख कर कम्पनी में काम करना चाहें।

३ वह जो शुल्क नहीं दे सकते उनसे फीस नहीं ली जायगी दोनों के वास्ते ही साथ साथ [illegible] है।

अपनी मदद आप करने का एक उत्तम उदाहरण —

आर्य समाज रावलपिंडी ने धर्मार्थ इस्पताल सेवा के लिये शहर में जारी किया है जहां से सैकड़ों मरीज प्रतिदिन मुफ़्त दवाई लेते हैं। इसके अतिरिक्त [illegible] मरीज़ों के घर जाकर डाक्टर देखते हैं। अन्य आर्यसमाजों को भी इससे शिक्षा ग्रहण करनी चाहिये।



(महात्मा गान्धीजी के पत्र यंग इंडिया से)

महात्मा गान्धी के सत्याग्रह आश्रम अहमदाबाद के मैनेजर ने नीचे लिखी बात प्रकाशित की है।

"हम बड़ी प्रसन्नता से सूचना देते हैं कि ५००) उस पुरुष को दिया जायगा जो कि कपास बेलने का सबसे उत्तम आविष्कार करेगा। सब मुकाबला करने वालों को अपने बेलन ८ जनवरी से पहिले पहिले भेज देने चाहियें।

बेलन के लिये नीचे लिखी बातें आवश्यक हैं —

१- इसके चलाने के कारण एक मध्यम दर्जे का आदमी ३ मन कपास प्रति घंटा बेलने के योग्य हो।

२ बेलन का मूल्य ५०) से अधिक न हो

३ यह सुगमता से एक स्थान से दूसरे

मुरादाबाद की प्रान्तीय सभा के कुछ संस्कार.

गतवर्ष प्रान्तीय राजनैतिक परिषद् सहारनपुर में हुई थी. इस वर्ष मुरादाबाद में हुई है। मुझे दोनों में आने का अवसर प्राप्त हुआ है। मेरी यह दृढ़ सम्मति है कि इस वर्ष की परिषद् गतवर्ष की अपेक्षा अधिक कृतकार्यता प्रत्येक अंग में स्पष्ट हो रही थी।

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इस वर्ष की परिषद् के सभापति बाबू भगवान दास एम.ए थे। मेरे पाठक उनके नाम से भलीभांति परिचित हैं, इस लिये उनके विषय में मुझे बहुत नहीं कहना है। उनका भाषण कैसा था इस विषय में मेरी दो सम्मति हैं। एक दृष्टि से तो वह बहुत उत्तम था और दूसरी दृष्टि से वह बहुत उपयोगी न था।

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यदि मेरे पाठक यह मानने को तैयार हो जावें कि यह सभा प्रान्तीय परिषद् न होकर "अखिल भारतीय राजनैतिक परिषद्" थी और उसके सभापति बा. भगवान दास थे। तब तो उनका भाषण बड़ा भाव पूर्ण था, सम्पूर्ण भारत से सम्बन्ध रखने वाला। ऐसा कोई आवश्यक प्रश्न न था जिस पर सभापति जी ने अपने विचार प्रकट न किये हों। इस दृष्टि से मैं समझता हूँ कि भाषण अपने ढंग का एक ही था।

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परन्तु जब मेरा पाठक मुझे कहता है कि वह इस सभा को "अखिल भारतीय" का रूप देने को तैयार नहीं है। तब तो मुझे भी अपनी सम्मति बदलनी पड़ती है। उस दशा में सभापति का भाषण ऐसा उत्तम नहीं था जैसा कि एक "प्रान्तीय परिषद्" के सभापति का होना चाहिये। कारण यह है कि भाषण में उन प्रश्नों पर एक शब्द भी नहीं कहा गया जो कि इस प्रान्त के लिये आवश्यक होंगे। इसी से अहूत सम्बन्ध रखते हैं और जिन पर विचार करना ही इस परिषद् का एक मुख्य उद्देश्य था।

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मुरादाबाद में मैंने एक दर्शक के मुंह से यह सुना था कि बाबू भगवान दास का यह भाषण यदि लाला लाजपत राय जी कलकत्ता के विशेष अधिवेशन में पढ़ सकते तो इस के साथ २ उन का नाम भी कांग्रेस के इतिहास में चिरस्मरणीय हो जाता। पाठक मेरे इस कथन के प्रमाण में इस का भाव-

सभापति की प्रकाशित वक्तृता में एक और बड़ा दोष था, और वह भाषा का है। एक शब्द में तो "खिचड़ी" कह सकते हैं [illegible] यह हिन्दी और यह उर्दू होने के साथ साथ शुद्ध अंग्रेज़ी भी नहीं है परन्तु तीनों का एक ऐसा रासायनिक मेल है जिसका वास्तविक आस्वाद काशी के जैसे अनपढ़ और गंवार दर्शक के लिए अभी तक अत्यन्त कठिन है, प्रकाशित व्याख्यान का एक २ पृष्ठ मेरे इस कथन का साक्षी है।

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स्वागत समिति के अध्यक्ष का भाषण उससे कहीं अच्छा था। हिन्दु-मुसलमान-एकता के महत्त्व और उसकी आवश्यकता पर कहते हुए अध्यक्ष महोदय ने अन्त में कहा कि शोक है। इस एकता का महत्त्व अभी तक मुरादाबाद ने नहीं समझा।" पण्डाल में कई चतुर सामाजिक दर्शक कहते थे कि यह बड़ा गहरा प्रश्न है परन्तु मुझ से पूछें तो मैं तो इस का वास्तविक अभिप्राय नहीं समझ सका।

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इस परिषद् में कुछ एक प्रस्ताव अधिक महत्त्वपूर्ण पास हुए हैं। इनमें से सब से अधिक मुख्य "असहयोग" का था। इस प्रस्ताव को पेश करने वाले बा. मुकन्दी लाल बी.ए. (सम्पादक दैनिक-भविष्य) का भाषण सर्वथा सामयिक था।

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कई नेताओं के भाषण हुए, मुझे सभी उत्तम लगे. इस लिये मैं सर्वोत्तम किसी को नहीं कह सकता। पं. मोती लाल नेहरू की वक्तृता यद्यपि संक्षिप्त थी पर उस अवसर के लिये सर्वथा उचित थी। श्री कृष्णस्वामी आयङ्गार जी के भाषण के विषय में मुझे बहुत अधिक कहना है और बहुत कम कहना भी है। परन्तु अपने पाठकों के लिये मैं बिल्कुल मौन ही पकड़ूंगा। वर्तमान शिक्षा की आलोचना का रूप देने के विषय में जो कुछ उन्होंने कहा वह चौथाई सदी के निजी अध्ययन तप और अनुभव का परिणाम होने के कारण अकाट्य था। वकालत छोड़ने और कौंसिलों के लिये खड़े न होने के विषय में भी उन का कथन सार्थक था।

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श्री महात्मा गान्धी जी ने जो कुछ कहा। उस पर मुझे कुछ विशेष कुछ टीका टिप्पणी करने की विशेष आवश्यकता नहीं है। जिन्हें उनके भाषण सुनने का सौभाग्य प्राप्त हुआ है। वे सी जानते हैं। कि उनका एक २ शब्द तुला हुआ व स्पष्ट और जादू का सा प्रभाव करने वाला होता है। लोग कहते हैं कि वे केवल पतले और दुबले हैं। उनकी आवाज भी दर्शकों तक कठिनता से पहुंचती है। ठीक होगा। पर मैं तो रसास्वाद ले रहे थे।

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भरी सभा के सन्मुख माननीय पं. मालवीय जी ने असहयोग के प्रस्ताव विरोध किया। इसलिये उनका साहस सराहनीय था। यदि कोई उनके भाषण के विषय में वैयक्तिक सम्मति लें। तो मैं कहूंगा कि वह सत्यता, स्पष्टता और सच्चाई के ख्याल से उनकी वक्तृता सारी परिषद में भर में श्रेष्ठ पूर्ण थी। पर यदि सामयिक भाव, सार्थकता, युक्ति और प्रभाव से उसकी महत्व जानी हो। तो तब वह बहुत उथली, सारशून्य और प्रभावरहित थी। मुझे तो अन्त तक उनकी वक्तृता का वास्तविक अभिप्राय ही समझ में नहीं आया। और न यह ही समझ आया। कि वह किस असली बात पर अधिक बल डालना चाहते थे। काशी के हिन्दू विश्वविद्यालय और अलीगढ़ के मुसलिम विश्वविद्यालय के सरकार से संबंध तोड़ लेने के विषय में भी परिषद् ने एक महत्वपूर्ण प्रस्ताव पास किया था। इसका सारा श्रेय बाबू शिवप्रसाद गुप्त को और मौलाना शौकत अली को है। दोनों ही सज्जनों को अपने २ विश्वविद्यालय की ईंट ईंट का पता था। इसलिये उनकी वक्तृताओं का सारपूर्ण और प्रभावजनक होना स्वाभाविक ही था।

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सच मुच वह समय बड़ा ही दुखदायी और कुत्सित था। जिस समय कि माननीय पं. मालवीय जी असहयोग के प्रस्ताव का और विशेषतः हिन्दू विश्वविद्यालय से संबंध रखने वाले अंश का विरोध करने के लिये खड़े हुए थे। श्री मालवीय जी की थोथी और लचर दलीलें बाबू शिवप्रसाद गुप्त की मैगजीनगन के सामने हवा हो गईं। श्री मालवीय जी की इस दयनीय दशा को देखकर मेरे दिल में यही आ रहा था कि यदि मैं भी कुछ पढ़ा लिखा होता और कुछ बोलना जानता। तो मैं श्री मालवीय जी की अवश्य सहायता करता। पर मैं तो अनपढ़ गंवार ही था। परन्तु सभापति के भाषण की तरह यह परिषद् भी अपने प्रान्तीयता के रूप की सार्थकता सिद्ध करती। यदि श्री पूज्यपाद श्रद्धानन्द जी बेगार को रोकने और इस प्रान्त से रफ्तनी को बन्द करने के विषय में दो प्रस्ताव न उपस्थित करते। मैं चूंकि गांव का ही रहने वाला हूं। और मेरी दृष्टि में काशी व अलीगढ़ के विश्वविद्यालय, खिलाफत और पंजाब के मामले की अपेक्षा यह अधिक अर्थ और महत्व रखता है। इसलिये मैं तो स्वामी जी का अत्यन्त कृतज्ञ हूं। कि उन्होंने ऐसे आवश्यक प्रस्ताव को जनता के सन्मुख उपस्थित किया। प्रतापगढ़ के किसानों के संबंध में भी जो प्रस्ताव पास हुआ था। वह भी अपनी जगह कुछ कम आवश्यक नहीं है।

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राजनैतिक परिषद् के विषय में मुझे कुछ और विशेष कहना नहीं है। इसके साथ और सभा सम्मेलनों के जो जलसे भी हुये थे। उनमें मुझे जाने का सौभाग्य नहीं हुआ इसलिये उनके लिये मैं चुप हूं। पर हां प्रान्तीय हिन्दी साहित्य सम्मेलन में अवश्य गया था। क्योंकि गंवार होते हुये भी मुझे हिन्दी से गाढ़ प्रेम है।

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प्रान्तीय राजनैतिक ~~सम्मेलन~~ परिषद् जितनी कृतकार्यता और सफलता के साथ हुई थी। उतनी ही अकृतकार्यता और असफलता के साथ यह सम्मेलन हुआ था। ऐसी मेरी दृढ़ धारणा है। छोटे २ दोषों को छोड़ते हुये भी कई ऐसी बातें हुईं। जो मुझ जैसे गंवार की नजरों से न छिप सकीं।

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स्वागतसमिति के अध्यक्ष का भाषण कुछ विशेष उच्च कोटि का नहीं था। सम्मेलन के सभापति श्री पद्मसिंह जी शर्मा का भाषण यद्यपि खोज परिश्रम और विद्वत्ता के साथ लिखा गया था। पर अनुचित रूप से लम्बा होने के कारण उसने न केवल मुझे पर कइयों को सुला ही दिया।

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सम्मेलन ने जो प्रस्ताव पास किये। उनसे ज्ञात होता था। कि उस के कर्ता धर्ता हमारे अभी समय की गति से बहुत पीछे हैं। भारत में असहयोग बदले के विषय में क्रियात्मक कार्य हो रहा है। पर इस सम्मेलन में अब भी सरकार के प्रति प्रार्थना उपासना के प्रस्ताव पास हो रहे थे। मुझे यह देख और भी अधिक आश्चर्य हुआ। कि प्रस्तावों का रूप और ढांचा लगभग वही था। जो कि अखिल-भारतीय हिन्दी साहित्य सम्मेलन में प्रतिवर्ष पास हुआ करते हैं। खैर मैं अपने पाठकों को कहूंगा। कि वे इस बात पर खुश होवें। कि सम्मेलन हो तो गया। पहिले तो उसके होने में भी बहुत सन्देह था।-- लो। अच्छा अब मैं आपसे बिदाई मांगता हूं। इति शम्।

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भविष्य वाणी.

प्रियपाठकवृन्द! इस वर्ष हमने ज्योतिष द्वारा फलोंकी गणना की है, चलते पुर्जोंकी भी अक्ल हैरान है। नवग्रहों की विचित्र चालसे हमतो खुद पेचीदा चक्कर में पड़ गये हैं, फिर भी जो मालूम हुआ है, उसे आपके साम्हने रखते हैं, आप घबराईयेमत हो जावही जो परमेश्वर को इष्ट है। न इस पर हमारा बस चलता चल सकता है और न आपका।

(१) जो जो सर्वप्रिय होंगे वही अप्रिय बनेंगे.

(२) इस वर्ष प्रभुका प्रकोप नहीं है इसलिये डाक्टरोंकी दाल न गलेगी सिर्फ अपना पेट ही पाल सकेंगे।

(३) वकीलों को अपना काम छोड़ना पड़ेगा.

(४). गोरोंको इस देश को छोड़कर कहीं अन्यत्र वास करना होगा,

(५). हिन्दू और मुसलमान अभी एक नहीं होसकते.

(६). चीजोंका भाव साधारणतौर पर घटता बढ़ता रहेगा व्योपार में कोई विशेष अन्तर न पड़ेगा.

(७). कपास की खेती खराब होने पर भी रूई का भाव मन्दा रहेगा.

(८). गवर्नमेण्ट कायम रहेगी.

(९). जो सहायक होंगे वही किनारा कर दिखावेंगे.

(१०). अदालतें खूनी मामलों से खाली न रह सकेंगी.

(११). हुक्काम हकीम नवकर ही रह सकेंगे अन्यथा बड़ी मुश्किल पेश आवेगी। पहिले तो बकरी चराकर जीते थे अब न जाने क्या करेंगे.

(१२). आयर्लेंड को स्वराज्य आजसे (२१-१०-१९२० ई) एक वर्ष २ महीना १५ दिन के रात के ९ बजकर १० मिनिट ४ सैकेंड पर मिलेगा.

सू.	मं.	बु.	बृ.	शु.	श.	रा.	के.
७	९	६	४	८	५	६	०
७	३	२१	२४	१४	२	१२	१२
१५	२२	१९	४४	४०	२२	५०	५०
५१	२२	२०	०	४८	५	२०	२०
६०	[illegible]	[illegible]					
५३							

हमारे सहयोगी

महाविद्यालय दैनिक.

महाविद्यालय दैनिक दो दिन से अखाड़े में उतरा हुआ है – खूब चिकना चुपड़ा है – आहा!! देखते ही रसलोलुप भ्रमरगण चारों ओर से घिर जाते हैं। दैनिक पत्रों में आज तक ऐसी सजावट देखने में नहीं आई – वाह, वाह क्या कहने ऐसी ऐसी चित्रकारी में ही तो रातें जागकर भी ऐसा महाव्रत का फल न होता तो फिर कब होता।

पत्र निकला है विजय दशमी की खुशी में – किन्तु आदि से अन्त तक देखने पर भी लेख से अधिक दशमी पर आपको लेख न मिलेगा। कविता तो एक भी पूरे विषय पर नहीं है। बीती बातों पर विशेष लेख लिखा गया है – पं. वागीश्वर जी की पहिले अंक में एक तथा दूसरे अंक में जो कवितायें निकली हैं वे सब दोनों सजह... पहिले निकल चुकी हैं उन्हें ही फिर उतारा गया है।

दैनिक पत्रों में समाचार खूब होने चाहियें उसमें यह ऐसे हैं देशीय समाचार देता है जैसा कि 'कांगड़ी समाचार'। स्थानीय महाविद्यालय के समाचार उसमें इतने ही होते हैं जितने मथुरा के मथुरा समाचार में।

पत्र में मौलिकता की बहुत कमी है। मालूम होता है कि इसके सम्पादक सम्पादक नहीं हैं अपितु संग्रह-कर्ता हैं। चारों ओर से लेख इकट्ठे किये गये हैं किन्तु कोई सम्पादकीय लेख नहीं है और नाही कोई टिप्पणी। हों कहां से जब कि सम्पादक महोदय कोई लेख ही नहीं लिखते।

किन्तु सम्पादक हैं बड़े गूढ़रहस्यार्थ... नाम तो उन्होंने 'भैरव' नाम ही ऐसा रखा है। कोई गूढ़ रहस्य ढूंढ निकाला है। मालूम होता है कि वे अपने नाम के चक्कर में पड़ गये हैं। हम लिखे देते हैं कि वहां सोम का अर्थ चन्द्रमा है और अंगिरा एक नक्षत्र है। सम्मिलित नामों के वे हैं ही सिद्धहस्त तभी तो उन्होंने हमें मित्र मित्र का दूसरा भाई बनाया है। मालूम होता है कि वे मित्र मित्र की नीति से सर्वथा अपरिचित हैं नहीं तो वे कभी ऐसी बड़ी भूल न करते।

संग्रह-कर्ता का परिश्रम अत्यन्त सराहनीय है। पत्र यदि चाहे तो अपने कुछ आप मित्रों मित्र बनना छोड़कर पर्याप्त उन्नति कर सकता है। लेख पुस्तक विषयों पर होने चाहियें। हम चाहते हैं कि यह पत्र दिन दूनी रात चौगुनी उन्नति... लेखों में उन्नति करे।

विजय-कुसुम.

आज इस पत्र के दो अंक हमें प्राप्त हुए हैं। पत्र पढ़ने वालों का खूब मनोविनोद करता है – कुछ ऐसी मिलाई होती है कि लोग हंसी रोक न हुए भी एकबार हंस ही पड़ते हैं। समाचार कविता में नवीन रीति से वर्णित होता है। समाचारों से एकबार अवश्य पढ़ना चाहिये।

इस का एक भाग स्त्रोत्र इत्यादि होकर छपा है – वह भी प्रशंसनीय है।

भारत में विदेशी

Protection लगाने से यह हानि होने की सम्भावना है कि विदेशी लोग यहां आकर अपने ही व्यवसाय के कारखाने खोल दें, जिस पर टैक्स लगाया गया है और सारा लाभ हस्तगत करलें अर्थात् विदेशी पूंजी के द्वारा सारा लाभ विदेशी ही लूट ले जाएं। जैसे जूट के व्यवसाय पर भारत का एकाधिकार (monopoly) होने पर भी हमें कोई लाभ नहीं होता। क्योंकि जूट के सब कारखाने विदेशियों के ही आधीन है और इनके प्रबन्धक विदेशी ही है। जूट की मिलें भारत में २०० के लगभग है। इन सब में प्रायः विदेशी पूंजी ही लगी हुई है। इस प्रकार सारा मुनाफा विदेशी चूस ले जाते हैं। इन सब के Planter भी अंग्रेज ही हैं। अतः यदि Protection द्वारा आय के व्यवसाय को उन्नति हो तो उस से भारत को क्या लाभ होगा। 'सर विट्ठलदास ठाकरसे कहते है कि "हम यह निःसंकोच कह सकते हैं कि जबतक भारतीय व्यवसाय (Industry) की उन्नति न हो जाए, भारत को मिट्टी का तेल, लोहा, सोना, तथा चान्दी आदि खनिज पदार्थों को उठाने में समर्थ न हो तबतक भूमि के नीचे ही रहने देने चाहियें और भारतीय व्यवसाय की उन्नति स्वदेशी पूंजी से की जाय"।

इस प्रकार से विदेशी पूंजी के भारत में आने से भारतवासियों को कोई लाभ नहीं। विदेशी पूंजी द्वारा यदि भारतीय व्यवसाय भूमण्डल में सब राष्ट्रों से भी अधिक उन्नत हो जाय तो भी कोई लाभ नहीं। इसके बजाय इस प्रकार जितना अधिक व्यापार बढ़ेगा हमें उतनी ही अधिक हानि होगी। क्योंकि पूंजी तो सब विदेशियों की [illegible] होगी और कारखानों में [illegible] पदाधिकारी भी विदेशी ही हो[illegible]

केवल ८ आने वाले मज़दूर भारतीय होंगे। इस उन्नति से हमें क्या मिलेगा? केवल मजदूरी और ८ आने। एक मैनेजर का वेतन ५००) से लेकर ८-१० हजार से भी अधिक होता है। श्रमियों का वेतन ८ आने या १० आने ही होता है। यदि श्रमियों का वेतन १) प्रतिदिन और विदेशी आफीसरों के उच्चपदाधिकारी का ५००) मासिक भी मान लें तो भी जब एक भारतीय को २५) मिलेगा तब एक विदेशी को ५००) मिलेगा अर्थात् एक २ विदेशी लगभग २० गुणा वेतन के रूप में ले जायगा। इतना ही नहीं, पूंजी भी विदेशी ही लगी हुई है और उस व्यवसाय का लाभ भी विदेश में ही चला जायगा। जैसे जूट के व्यवसाय का हाल हुआ। युद्ध के दिनों में जूट के व्याव[सा]य में २००% से भी अधि[क] हुआ परन्तु सब विदेश गया। उपभोक्ताओं से अपील की जाती है कि Protection लगाने से कुछ कुछ काल के लिये कठिनाई होगी। भारतीय व्यवसाय की उन्नति के अनन्तर सब सामान सस्ता हो जायगा। तुम्हारा जो धन विदेशी सामान के द्वारा विदेश को खिंचा चला जाता है वह बन्द हो जायगा। किन्तु यदि विदेशी पूंजी द्वारा बढ़े हुए व्यवसाय को लाभ हुआ तो उन बिचारे उपभोक्ताओं को क्या लाभ? उनका धन तो अब पूर्व से भी अधिक विदेश को जायगा। मिस्टर कोयाजी के असमत ने कहा था कि भारत में व्यावसायिक उन्नति का विचार करते हुए यह ध्यान रक्खा जाय कि —

(क) कच्चा माल अपने देश का ही काम में लाया जाय।

(ख) इसके लिये पूरा प्रयत्न किया जाय कि इनका लाभ भारत में ही रहे।

(ग) यहां नये २ व्यवसाय चलाये जायं इसलिये Protection लगाते समय सरकार को ध्यान रखना चाहिये कि भारत में विदेशी पूंजी न आ सके।

'अपूर्ण'

हिन्दी साहित्य सम्मेलन

हिन्दी साहित्य सम्मेलन गुरुकुल के गौरव की बढ़ाने सम्मेलनों में से एक है। विद्यालय की संजीवनी सभा ने इसको जन्म दिया था। यह अधिवेशन उसी सभा की ओर से सफलता पूर्वक हुआ। क्रमशः विकास करते हुए इस सम्मेलन ने कुल के अच्छे से अच्छे सम्मेलनों का मुकाबला करना शुरु कर दिया। इसमें इसे सफलता भी हुई। इस साल विद्यालय [illegible] इन्द्रप्रस्थ गुरुकुल चला गया है। कुल में इस सम्मेलन का अती [illegible] अतः [illegible] [illegible]

सम्मेलन में कुछ आवश्यक तब्दीलियाँ भी कुछ गम्भीर बढ़ गई थी। सबसे दूसरे बहनों की ओर रुचि बढ़ गई है। साथ ही साथ वह पुरानी प्रतिष्ठा तो अब भी नहीं है वह नया जोश नहीं रहा। उसका स्थान परिपक्व विचार ने ले लिया है, वे नये उत्साही [illegible] नहीं रहे जो इसके जीवन थे। सम्मेलन शान्ति पूर्वक हुआ पर वह नहीं रहे। वे यह शान्ति कुछ पे की [illegible] लोगों लता मेला रहा था। जैसी और [illegible]।

फिर भी सम्मेलन उत्तम हुआ। उसके सफल बनाने में सब उपसभी जैसे कुछ [illegible] रहता था।

यह सम्मेलन तीन दिन तक मनाया गया [illegible]

[illegible] साधारण [illegible]

	कार्य विवरण

प्रथम बैठक –

सभास्थल में प्रविष्ट होने पर सजावट की मनोहरता चित्त पर अंकित हो जाती थी। स्वच्छ सुन्दर तथा विशाल पुस्तकालय भवन का शृंगार झण्डियों बेलों तथा सुराहियों से भली प्रकार किया गया था। एक बात बहुत खटकती थी – यह थी कि चित्रों के प्रकाश में सुरुचि का अत्यन्ताभाव था। चित्र बिना स्थान उद्देश्य या समय का विचार किये ही लगाये गये थे। दूसरी कमी यह थी कि संवाद दाताओं को रद्दी की टोकरी की जगह उत्तम स्थान दिया गया था। उनका स्थान प्रधान जी की विशाल मेज के नीचे था। वहाँ से कुछ दिख सकता था तो वह केवल प्रधान जी के वन्दनीय चरण ही थे। और प्रबन्ध उत्तम था। प्रतिनिधियों तथा स्वागत समिति के सभ्यों के बैठने के ... है।

... तरह ... का

... र

सम्मेलन की कार्यवाही प्रारम्भ हुई। स्वागत समिति के अध्यक्ष जी ने अपना भाषण पढ़ा। भाषण परिश्रम से लिखा हुआ प्रतीत होता था। विचार अभिनन्दनीय थे शैली उत्तम थी। उसके भाषण के बाद स्वागत गीति गाई गई। फिर प्रधान जी के चुनाव का प्रस्ताव भिन्न भिन्न भाषाओं से किया गया। प्रधान जी गुरुकुल के सुप्रसिद्ध कवि हैं, आपका शुभनाम पं. सत्यकाम जी सिद्धान्तालंकार है। आप प्रतिभावान हैं, कई बार आपने अपनी प्रखर प्रतिभा का परिचय दिया है। साहित्य के आप पुराने सेवक हैं। आपको यह गौरव दे-

प्रधान

दो

विषय में कुछ नई बातें प्रस्तुत हुईं। उन्होंने इस क्षेत्र में [illegible] लाकर प्रकाश डाला था। आपने [illegible] की उत्कृष्ट सामाजिक प्रतिभा का [illegible] परिचय दिया था। इसके बाद साहित्य विभाग का कार्य प्रारम्भ हुआ। कवि [illegible] सिंह जी की [illegible] पर कविता [illegible] हुई। इनका निबन्ध भी [illegible] था। हिन्दी साहित्य पर इनका परिश्रम [illegible] पूर्ण निबन्ध। इस विभाग की शोभा थी। कवि जी ने इस सम्मेलन में विशेष भाग लिया था। डा. [illegible] जी का परिश्रम सराहनीय था।

[illegible] जी की कविता तथा निबन्ध [illegible]

[illegible] हु.

[illegible]

गई है। [illegible] ने प्रस्ताव "हिन्दी साहित्य सम्मेलन [illegible]" की [illegible] प्रकट करते [illegible] हिन्दी [illegible] न देने [illegible] थी। [illegible] प्रस्तुत हुए। दोनों प्रस्ताव सर्वसम्मति से पास हुए।

द्वितीय बैठक :-

"हिन्दी [illegible]"

प्रस्ताव सं. 3 प्रस्तावक तथा अनुमोदक की सूचना प्रकाश डालने पर बिना विवाद स्वीकृत किया गया। प्रस्ताव सं. 4 [illegible] प्रस्तावक डा. [illegible] जी ने उपस्थित किया। आपका भाषण उत्तम हुआ। आपके भाषण पर [illegible] जी का [illegible] अनुचित [illegible] थी। डा. [illegible] जी ने अनुमोदन किया [illegible] जी ने इस [illegible]

कि बार बार प्रार्थना करने पर भी यह अस्वीकृत कर दी जाय अत्यन्त अनुचित है। ब्र. [illegible]दत्त जी चतुर्वेदी ने भी द्वितीय भाग का विरोध किया। और भी कई विरोधी सज्जन थे। सम्मति ली जाने पर (क) भाग स्वीकृत हुआ तथा (ख) भाग अस्वीकृत हुआ। तदनन्तर प्रस्ताव सं. ५ ब्र. जयदेव जी ने उपस्थित किया। ब्र. विष्णुदत्त जी ने समर्थन किया। ब्र. धर्मदेव जी ने क और ख भागों का परस्पर विरोध दिखाया। सम्मति लेने पर पूर्ण प्रस्ताव स्वीकृत हुआ। प्रस्ताव सं. ८ पर ब्र. भीमसेन जी ने विरोध करते हुए "हिन्दी" के स्थान पर "देवनागरी" न रक्खे जाने पर आक्षेप किया। पं. सत्यव्रत जी ने "हिन्दी" को ठीक बताया। प्रस्तावक ब्र. इन्दु जी ने शंकाओं का [illegible] किया। प्रस्ताव स्वीकृत [illegible] ति हुई।

तदनन्तर अतिथि श्री नारायण चतुर्वेदी अध्यक्ष इन्टरमीडियेट कालेज लखनऊ ने अपनी शान्ति भावना से उपस्थित लोगों को आनन्दित किया। प्रस्ताव सं. ६ पर लाहौर सम्बन्धी विज्ञप्ति पढ़ी [illegible] पुनः प्रस्ताव सं. ८ उपस्थित हुआ। सर्वसम्मति से स्वीकृत हुआ। पुनः ब्र. इन्दु जी ने प्रस्ताव सं. ६ उपस्थित किया। पं. सत्यव्रत जी ने विरोध किया प्रस्ताव अस्वीकृत हुआ। इसके बाद प्रस्ताव सं. ९ तथा प्रस्ताव सं. १० ब्र. समरसिंह जी तथा ब्र. धर्मदेव जी द्वारा उपस्थित किये जाकर स्वीकृत हुए। आज की कार्यवाही शान्ति पाठ के उपरान्त [illegible]



भाग ६ [illegible] २० [illegible] - १२ [illegible] अंक १

[illegible] - [illegible]

संपादक - [illegible]

विजय - वैजयन्ती



भाग  ६	सम्पादक — कु. इन्दुसेन [illegible] :-	अङ्क १

तन की दुति श्याम सरोरुह लोचन
कञ्ज की मंजुलताई हरैं,
अति सुन्दर सोहत धूरि भरे
छवि भूरि अनंग की दूर धरैं ।
दमकै दतियां दुति दामिनि ज्यों
किलकैं कल बाल विनोद करैं,
अवधेश के बालक चारि सदा
मम मानस मन्दिर में विहरैं ॥



स्टेज पर

विजय वैजयन्ती

३० आश्विन १९८२

स्टेज पर

नाट्यशाला पर से पर्दे उठते हैं, रंगमंच पर नट नर उतरे हैं। नए दृश्य दीख रहे हैं। उनको देखने की इच्छा से 'विजय वैजयन्ती' भी स्टेज पर अवतरित होती है। आगामी हृदयंगम करने के लिए पुराने दृश्यों का सिंहावलोकन भी अनुचित न होगा पर फलदायी होगा।

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गत वर्ष जब 'वैजयन्ती' आंखों से ओट में हुई थी तब बंगाल के हृदय पर लार्ड लिटन ने 'बंगाल ऑर्डिनेंस' द्वारा प्रहार किया था इस कारण देश भर में नवीन उत्तेजना फैल रही थी नूतन चैतन्य प्रवाह प्रवाहित हो रहा था, नई स्फूर्ति की दीप्ति से दीप्तिमान हो रहा था [illegible] दल के [illegible] गौरव की रक्षा के लिए नए भावों से [illegible] हो रहा था। इस हलचल [illegible] ने एकता सम्मेलन आयोजन किया। नेता लोग कई बार जमा हुए पर देश के विभिन्न दलों को जोड़ने [illegible] सूत्रों का पता न लगा सके। [illegible] नेताओं ने घोषित कर दिया कि इस समय एकता सम्भव नहीं है। [illegible] इस ओर बढ़ने वाले पर मन्दगति से बढ़ रहे हैं।

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देश की जीवित जाग्रत शक्ति एक-मात्र स्वराज्य दल की शक्ति बढ़ती गई। म. गान्धी ने इस समय स्वराज्य दल की शक्ति बढ़ाना अपना कर्तव्य समझा। स्व. देशबन्धु से हाथ मिलाने के लिए अपने चरखा मूल मताधिकार के सिवाय सब को त्याग दिया। सब दलों को बेलगांव आने का निमंत्रण दिया पर यह प्रार्थना बहरे कानों पड़ी। आशाजनक फल न हुआ। बेलगांव की कांग्रेस, कांग्रेस के इतिहास में कई दृष्टियों से अपूर्व हुई। म. गान्धी सभापति थे। असाजैनैतिक कार्यक्रम स्वीकार किया गया। व्यक्तिपूजावाद की वेदी पर सब सिद्धान्तों का बलिदान किया गया। अपनी स्वतंत्र सम्मति और विवेक बुद्धि को प्रतिनिधियों ने गान्धी भक्ति पर चढ़ा दिया। कांग्रेस के विद्रोही दल स्वराज्य दल ने भी मूक भाव से नतमस्तक हो इसे स्वीकार कर लिया। कांग्रेस का उत्कर्ष बढ़ता गया। कौन्सिल के अखाड़े में स्वराज्य दल ने अपूर्व विजय प्राप्त की। भारत की न्यूनतम मांग, सभापति निर्वाचन, बंगाल ऑर्डिनेंस का अस्वीकार करना, स्कीन कमेटी से हट लेने का प्रस्ताव पास करना [illegible] के समय की गहरी विजय जहां स्वराज्य दल का गौरव बढ़ा रही थी वहां बंगाल और युक्तप्रदेश के सभापति निर्वाचन [illegible] की हार भी कम शानदार न थी। पं. श्री दास के एकाएक उठ

जाने से स्वराज्य दल की अवस्था बदल गई। आज स्वराज्य दल के प्रधान नेता कमीशनों और कमेटियों के सभासद होना अनुचित नहीं समझते। Honourable Co-operation सम्मान पूर्वक पूर्ण सहयोग का प्रतिदिन अवसर ढूंढा करते हैं। जिनको एक दिन ठुकरा दिया था, जिन पदों के लेने वालों को देशद्रोही कहा जाता था उन्हीं त्याज्य वस्तुओं को लेने के लिए स्वराज्य दल के सदस्य वकालत करने से नहीं चूकते। पटना कांग्रेस कमेटी के अधिवेशन ने स्थिति बदल दी है। स्वराज्य दल के हाथ में पूर्ण शक्ति देकर एकता का मार्ग बन्द कर दिया है। चार आने का प्रवेश शुल्क देकर सब के आने के लिए द्वार खोल दिया गया है। यह परिवर्तन स्वराज्य दल की तोंद बढ़ाने वाला अवश्य होगा पर आन्तरीय शक्ति को बढ़ाने में सहायक न होगा।

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ब्रिटेन से सहयोग की चर्चा साल भर रही। इस सहयोग को प्राप्त करने के लिए स्व. देशबन्धु ने राष्ट्रीय स्वतंत्रता के झण्डे को भी झुका दिया पर वायसराय की यात्रा और उनकी भारत मंत्री से अप्रकाशित बातचीत का नतीजा जो प्रकाशित हुआ उससे भी अपनी भूल न समझ कर सम्मान पूर्ण सहयोग को ढूंढने में अभी तक चिन्तित हैं।

असहयोग को सदा के लिए दफना दिया गया है। उसकी कब्र पर आज सहयोग का झण्डा फहरा रहा है। कलकत्ता कांग्रेस के समय जो नया अध्याय प्रारम्भ हुआ था उसका अन्त पटना में हो गया। आज देश सहयोग की आवाज से गूंज रहा है। स्वराज्य दल के अध्वर्यु 'सहयोगाय स्वाहा' कह आहुतियां दे रहे हैं।

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श्रीमती बेसेन्ट ने एक कॉमनवैल्थ के बिल के रूप राष्ट्र की इच्छा प्रकट करने का संकल्प किया। ब्रिटिश साम्राज्य की छत्र छाया में भारतीय स्वाधीनता का मन्दिर निर्माण हो; भारतीय स्वराज्य का नन्दन वन फूले फले। परन्तु जिन को असह्य है उन के लिए इस पर विचार करना समय व्यर्थ गंवाना है। पर जो ब्रिटिश साम्राज्य में भारतीय स्वशासन देखना चाहते हैं एक ही [illegible] शासन के दो फलों में ब्रिटेन और भारत को देखना चाहते हैं उसका [illegible] कर स्वागत नहीं करते न [illegible] करते हैं। महाप्रभुओं द्वारा अस्वीकार हो जाने के अपमान से [illegible] हैं।

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साम्प्रदायिकता की विषैली हवा और लिबरल से बहती हुई शान्ति की भण्डियां हिलाने वाले

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हिलाते रह गए। पर विनाशकारी बम रुकवाने से न सकी। विश्व विभूति का उपवास निरर्थक सिद्ध हुआ। एक ओर शान्ति पाठ के मंत्रों का उच्चारण किया जारहा था दूसरी ओर सिर फोड़े जारहे थे और प्रेम द्वारा एक दूसरे का गला घोटा जारहा था। आज सफलता की प्रतिमा ने भी इस रक्त प्रवाह के सम्मुख से हटना ही उचित समझा है।

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जिसकी वाणी के प्रभाव से राष्ट्र उठ बैठा, जागरण के प्रारम्भ में जिसकी ओजस्वी वाणी और अपूर्व आत्मबल ने राष्ट्र को मार्ग दिखाया और आत्म-दर्शन कराये उस महान आत्मा के चरणों में लाखों ने मथुरा नगरी में एकत्रित होकर अपनी श्रद्धा पुष्पाञ्जलि चढ़ाई। यह श्रद्धा का प्रवाह महर्षि के अनुयायियों को एक सम्प्रदाय में परिवर्तित कर देगा या संसार को सेवक एक लोक होगा यह भविष्य बतायगा।

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जिसके वीरता पूर्ण बलिदान पर देश झूम उठा संसार दांतों तले उंगली दबा कर आंखें फाड़कर देख रहा था। मगर गान्धी अपने शत्रु की सफलताओं को देखकर फूले न समाते थे जीतो और बाद कौम का युद्ध समाप्त होगया। सफलता का ताज वीरों को पहना दिया गया। इस घोर अन्धकार के बीच में यही एक प्रकाश की उज्वल किरण है

जिस पर देश गर्व कर सकता है।

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हमारा [अपमान] अपमान हुआ, हमारे जीवन का मूल्य कूता गया इसकी कथा बड़ी हृदय द्रावक है। प्रवासियों की कथा लिखने के लिए इस लेखनी में सामर्थ्य नहीं है। प्रवासी भारतीय निकाले जारहे हैं, अपने स्वत्वों से वञ्चित किए जारहे हैं, मनुष्य मात्र के अधिकार से भी वञ्चित किए जारहे हैं। पर हम लोगों को इस तरफ ध्यान देने का अवसर ही नहीं मिलता। एशियाटिक बिल पेश है। ११ अक्टूबर की सभाएं दीन भारत की पुकार परमात्मा के दरबार में सुनाने जारही हैं।

x x x

बवण्डर उठा, आकाश का रंग पीला हुआ, संसार ने समझा युद्ध होने वाला है बन्दूकों का धुंआ भी उड़ा, प्रशान्त महासागर का शान्त जल क्षुब्ध भी हुआ पर शस्त्र जो शत्रुओं को मारने के लिए उठे थे नायकों के भ्रम के कारण आपस में ही चल पड़े। बन्दूकों के कुन्दों का हमला अपने साथियों पर ही हुआ। शत्रुओं की चाल कारगर हुई। एशिया का स्वतंत्रता सूर्य फिर घनघोर बादलों की ओट में छिप गया। सुनहली किरणें जिनसे अल्ताई पर्वत माला की बर्फीली चोटियां चमक उठी थीं और हिमालय की हिमाच्छादित धवल शिलाओं पर प्रतिबिम्बित होकर [illegible] को उत्पन्न कर रही थीं विलीन होगईं।

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भूमध्य सागर के द्वार पर स्थित मोरक्को के रिफ सर्दार अब्दुल करीम की तलवार प्रखर तेजसे चमक तीर-ही। स्पेन और फ्रांस का संयुक्त बल भी सामना न कर सका और वह तेज मंद होगया है पर वीर राणा प्रताप की भांति पर्वतों में वास कर स्वतंत्रता की ओर अपने देश के गौरव की रक्षा कर रहा है खनिज पदार्थों का लोभ, टंगियर बन्दरगाह का महत्व, भूमध्य सागर का प्रभुत्व ही उसके नाश के कारण हो रहे हैं। रिफ लोग रणचण्डी की पूजा अपने हृदय के गर्म खून से शिर-पुष्पों से कर रहे हैं यह व्यर्थ न जायेगा।

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इराक के हृदय पर ब्रिटेन दांत गड़ा रहा है। मोसल का प्राकृतिक किला कुर्दों की अपनी रक्षा के लिए आवश्यक समझते हैं अपनी जान देकर उस को लेंगे। प्रत्येक युवक कटिबद्ध है, मरने मारने को उद्यत है, ब्रिटेन अपने लोगों को भी परवा न कर उस को लेने के लिए अपने जंगी बेड़ों को प्रस्थान करने की आज्ञा दे रहे हैं ब्रिटेन भारत पर तथा एशिया पर प्रभुत्व जमाने के लिए तथा तेल को लूट लेने के लिए अपने धन जन को पानी की तरह बहाने को उद्यत है। रूस की त्यौरी चढ़ाते देख कर ब्रिटेन के माथे का बल उतर गया है

× × ×

[illegible]

सब अपने पांसे फेंक रहे हैं। जर्मनी मौका ताक कर कभी रूससे हाथ मिलाता है तो कभी ब्रिटेन और फ्रांस की ओर कातर दृष्टि से देखता है। लोकार्नो में बैठ कर मध्य यूरोप की स्वास्थ्य कामना की जा रही है। शैलों को तुम्हारे लिए शान्ति और प्रेम का कृत्रिम जल तैयार किया जा रहा है। [illegible] जर्मनी से क्या पोलिश सन्धि कर रहे हैं। जर्मनी फ्रांस याचना को देख कर विश्वासघात पूर्वक कर रहा है [illegible] देख रहा है।

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दूरदर्शी राजनीतिज्ञ भविष्यवादी, आत्मवादी लोग सब एक स्वर से कह रहे हैं कि २५-से ३० के बीच में भयानक युद्ध होने वाला है। सब के दिल [illegible] हैं [illegible] की प्रतीक्षा उत्सुकता से कर रहे हैं। [illegible] स्वागत के लिए ब्रिटेन और अमेरिका नए जलपोत बना रहे हैं। परतंत्र जातियां क्रान्तिजन्य रक्तधारा से स्वागत करने को उत्सुक हैं। एशिया यौरप का [illegible] होकर रहेगा या अपने भाग्यों का मालिक रहेगा इस का निर्णय इस युद्ध में होने वाला है।

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ऐसे समय [illegible] [illegible] संकुल, विकट, कंटीले मार्ग में पग धरती है। भगवान् [illegible] करें।

गगनांगण में

चरणों में — दो मास के बाद अब कुलवासी आज नव उत्साह के साथ उल्लास भरे हृदयों से कुलमाता के चरणों में भक्ति की अंजुलि सुमनांजलि चढ़ाने को उद्यत हैं। हम भी इस अवसर पर अपनी तुच्छ [illegible] श्रद्धाञ्जलि सादर माता के चरणों में समर्पित करते हैं। [illegible] से कन्धा मिला कर कुल की रक्षा का व्रत ग्रहण कर रहे हैं और कुल गौरव की रक्षा के लिए विजय यात्रा का उपक्रम कर रहे हैं [illegible] हो। 'विजय वैजयन्ती' सदा फहराती रहे। कुल गौरव रक्षा का आज का [illegible] कुल बन्धुओं का सफल हो। यह हमारी हार्दिक कामना है।

अपूर्व समारोह — जातियों और संस्थाओं के जीवन की परीक्षा जातीय पर्वों और जयन्तियों का समय होता है। सम्पूर्ण उत्साह, शक्ति और सामर्थ्य का प्रदर्शन किया जाता है। दीपमाला का त्यौहार भी भारतीयों के लिए ऐसा समारोह है जिस दिन [illegible] वैभव शक्ति उत्साह और उल्लास प्रकट होता है। अमावस की अंधियारी रात भी उसके आलोक को दबा नहीं सकती। पर्व मनाने के लिए कुल में अपूर्व समारोह किया गया है। इस समारोह के अवसर पर अपने सब भेद भावों को त्याग कर शुद्ध दिल से प्रत्येक कुलवासी सम्मिलित हो। यह अपूर्व समारोह नूतन जीवन की सूचना हो, कुल के जीवन में क्रान्तिकारी परिवर्तन करने का सन्देश वाहक हो यह हमारी हार्दिक अभिलाषा है।

सांस्कृतिक [illegible] — आज मातृ [illegible] मन्दिर में मातृ पूजा के लिए इकट्ठे हुए हैं पर पूजा के साधन सब विदेशी हैं। अपने नेता की स्मृति जिन साधनों और जिस ढंग से कर रहे हैं वह सर्वथा विदेशी नहीं तो उसमें हमारा कुछ नहीं है। उन में से ऐसी कोई चीज नहीं है जिस को हम अपना कह सकें। जिन को हम देशी खेलें कहते हैं उन के प्रति हमारे दिल में आदर का भाव नहीं है, उन को सीखने के लिए हम समय देने को उद्यत नहीं हैं। माना कि वे आधुनिक नहीं रहे पर क्या हमारी नव मनोमोहक शालिनी प्रतिभा और कल्पना शक्ति [illegible] लगा सकते हैं जो पतलून भी इन को आधुनिक और [illegible] आकर्षक तथा मनोरञ्जक बना देंगे। जिन खेलों के प्रति हमारे दिल में [illegible] है, यद्यपि वे हमारे दिमाग की उपज नहीं हैं, न भारतीय सांचे में ढाल पाये हैं, उन के द्वारा क्या राष्ट्रीय [illegible] बढ़ाई जा सकती है? [illegible] क्या उन से सम्भव है? यद्यपि प्राचीन ग्रन्थों से श्लोक निकाल कर इन की प्राचीनता सिद्ध की जा सकती है पर यह निश्चित सत्य है कि इन का रूप भारतीय नहीं है। इन खेलों [illegible]

के लोग भी — जिन को हम अपना आदर्श और गुरु मानते हैं — छोड़ते जाते हैं। [illegible] योग्य नहीं समझते उस समय उन से चिपटे रहना क्या इसके लिए मंगल जनक है? [illegible] त्यौहार के अवसर पर बन्धु गण इन [illegible] देते [illegible] — युग यह कहता है कि यह [illegible] होना चाहिये जो समय की विशेष [illegible] के अनुरूप हो और वर्तमान समय के अनुकूल हो। [illegible] देश में धीरे धीरे आत्म भाव का ह्रास होता जा रहा है उस को पुनः जागृत करना आवश्यक है। आज प्रत्येक व्यक्ति अपनी रक्षा भी अपने आप करने में असमर्थ है। अपने प्राणों की रक्षा के लिये तथा अपनी इज्जत बचाने के लिये हम पुलिस और कोर्ट की शरण लेते हैं। क्यों कि हमने अपने देश को और उस को अपना करने वाली वीर पूजा को सर्वथा भुला दिया है। हम को अपने देश की चीजों को — क्यों हमारी है सदा अपनाना चाहिये। विदेशी चीज को अपनाते हुए अपनी चीज को न खो बैठें इसका हमें सदा ध्यान रखना चाहिये। इस साम्प्रदायिक मनोमालिन्य के समय आत्म रक्षा के लिये स्वावलम्बी होना और भी अधिक आवश्यक है।

धारा की दिशा — कुल के जीवन प्रवाह की धारा किस दिशा की ओर जा रही है इसको विश्लेषण करना सरल नहीं है। स्फूर्ति चैतन्यता और जीवन के द्योतक समारोह और खेले हैं। यही दो अवसर हैं जहां कुल वासी उपस्थित होते हैं [illegible] इन चीजों के प्रति उत्साह और [illegible] करते हैं। [illegible] दिल [illegible] हैं [illegible] के [illegible] — [illegible] धन्यवाद [illegible] मिल [illegible] मिलता [illegible] है। [illegible] नहीं है। यह [illegible] की [illegible] के साथ तुलना [illegible]। [illegible] में [illegible] और कहर है। यही हम की अवस्था है। दोनों को एक दूसरे से सहयोग न देने की शिकायत बनी रहती है। क्या इस अवस्था को दूर करने में अग्रसर होंगे?

नए सूत्रधार — म. ब. स. और [illegible] के नए तन्त्र के कार्य कर्ताओं का चुनाव हो गया है। दोनों समाजों के चलाने वाले [illegible] हैं जिन्होंने समाज के [illegible] भाग नहीं लिया है [illegible] कहा जा सकता है। कार्यकारिणी के सदस्य गुरुकुलीय समाजों के भरोसे के व्यक्ति और अनुभवी सज्जन हैं। इसलिये समाज की सफलता के विषय में कुछ नहीं कहना। पर चुनाव के सम्बन्ध में एक दो बातें कहनी हैं। जिनको हम यथा समय प्रकट करेंगे। आज हम नूतन कार्य कर्ताओं को '[illegible]' की ओर से बधाई देते हैं।

अपने विषय में —

'विजय वैजयन्ती' का जन्म जिस काल में हुआ था उस समय की और आज की परिस्थितियाँ भिन्न हैं। व्यवस्था सर्वथा बदल गई है। दैनिक महाविद्यालय और विजय वैजयन्ती परस्पर गतवर्ष संचालकों को [illegible] संयुक्त थे। आज भी वैजयन्ती के संचालक और [illegible] के अनुरूप अधिकारी हैं। आज दैनिक महाविद्यालय की [illegible] संयुक्त करने की इच्छा पूर्ण की है। अब दोनों [illegible] एक साथ में रहेंगी और फूले फलेंगी। [illegible] के संचालन में जो [illegible] होते हैं। वैजयन्ती [illegible] और इसकी उत्तरता के लिये [illegible] भाव से है। वैजयन्ती ने [illegible] सेवा करने से मुख नहीं मोड़ा, सब अन्य सहयोगी [illegible] करते रहे हैं। [illegible] अधिकार पूर्ण [illegible] करने का अधिकार [illegible] है। [illegible] आप के [illegible] सहयोग की [illegible] है। आशा है [illegible] हाथ का तिरस्कार न करेंगे।

व्यवस्थापक
नरेन्द्र नाथ

शंकर सन्देश

"विजय वैजयन्ती" की विजय दुन्दुभी कुल में ही नहीं अपितु समस्त विश्व में व्याप्त हो! कुलिशता-[illegible] पुनः विजयी होकर अपनी तंत्री के मधुर नाद से विश्व को मुग्ध कर ले और उस की 'विजय वैजयन्ती' फिर पुण्य गगन में फहरा उठे।

विजय वैजयन्ती

गुरुकुलीय 'ओलिम्पस' पर क्रीड़ा का विराट समारोह

२०-६-८२
गुरुवार

६ — ७ बजे तक राष्ट्रीय झंडे की स्थापना।

वन्दे मातरम्

कुलगीत

'खेलें' —

७ से १०½ तक प्रातः

- कुरसी दौड़
- चार टांग की दौड़ (प्रथम बार)
- चम्मच दौड़
- मेंढक दौड़
- झण्डी दौड़
- अन्य युद्ध

मध्यान्होत्तर

२-३० से ६ तक

- लम्बी कूद
- ऊंची कूद
- टप्पा कूद
- तकिया युद्ध
- तैरी दौड़
- बोरी युद्ध

२१-६-८२
शुक्रवार

प्रातः ७ से १०½ तक

- वृक्ष पर चढ़ना
- २०० गज की दौड़
- बोरी दौड़
- ~~तकिया युद्ध~~
- तेज़ चलना
- गोला फैंकना
- गेंद फैंकना
- सिंह तैरी
- विकट तैरी
- डुबकी
- तमेड़ दौड़

मध्यान्होत्तर

२½ से [illegible]

- तकिया युद्ध (अन्तिम)
- चार टांग की दौड़ [illegible]
- सवारी दौड़ (Pick-a back Race)
- घाटा दौड़ (अधिकारी वर्ग की) (Handicap Race)
- बाधा दौड़

१-७-८२
शनिवार

७ से ८ तक प्रातः

सान्मुख्य (फुटबाल)

अनन्त [illegible] और उपाध्याय वर्ग

विजय - वैजयन्ती

[illegible]	चार रंग की दौड़	त्रयमन्च दौड़	गेरुआ दौड़	हरुआ युद्ध	अन्ध युद्ध
प्रकाश १३	योगेन्द्रपाल	इन्द्रसेन	देवदत्त	सुरेन्द्र	महावीर
ब्रह्मदत्त	जनार्दन	चन्द्रगुप्त	सुरेन्द्र	धर्मदेव	हरिवंश
हरिवंश	बलराम	जयदेव	ब्रह्मदत्त	हरिवंश	जनार्दन
बलराम	रणधीर	पूर्णचन्द्र	हरिवंश	बलराम	रणधीर
रणधीर	हरिवंश	हरिवंश	जनार्दन	रणधीर	नरेन्द्र
यज्ञदत्त	नरेन्द्र	सुरेन्द्र	बलराम	नरेन्द्र	जगदीश
अवनीन्द्र	वेदप्रकाश	ब्रह्मदत्त	रणधीर	जगदीश	ब्रह्मदत्त
नरेन्द्र	योगीराज	जनार्दन	नरेन्द्र	इन्द्रसेन १२	वेदप्रकाश
जगदीश	भीमसेन	बलराम	इन्द्रसेन	जयदेव	भीमसेन
योगेन्द्र	शिवप्रसाद	नरेन्द्र	जयदेव	समरसिंह	भीमसेन
योगराज	इन्द्रसेन	वेदप्रकाश	समरसिंह	भीमसेन ११	इन्द्रसेन
भीमसेन ११	जयदेव	योगीराज	भीमसेन	देवदत्त	देवदत्त
शिवप्रसाद	समरसिंह	प्रकाश १२		भीमसेन	पूर्णचन्द्र
इन्द्रसेन	देवदत्त	भीमसेन			भीमसेन
जयदेव	भीमसेन	शिवप्रसाद			अवनीन्द्र
समरसिंह	कृष्णदत्त	समरसिंह			
देवदत्त		देवदत्त			
भीमसेन १२		भीमसेन			
ओमप्रकाश		कृष्णदत्त			
कृष्णदत्त		अवनीन्द्र			

— सूचना —

आवश्यकतानुसार इन नामों में वृद्धि भी की जासकती है।

२ म० वाग्वर्धिनी सभा का भावी कार्यक्रम

भावीय व्यवस्थापक सभा की बैठक	२६ अक्तूबर
जातीय महासभा	दिसम्बर का प्रथम सप्ताह
जन्मोत्सव	दिसम्बर का द्वितीय सप्ताह
कविता सम्मेलन	गुरुकुल वार्षिकोत्सव पर
वाद विवाद का अधिवेशन	२ नवम्बर

वाद विवाद का विषय- "जनतन्त्र और एक तन्त्र राज्य में कौन श्रेष्ठ है ?"

नोट - इस कार्यक्रम में परिवर्तन भी किया जा सकता है। भवदीय मन्त्री

[illegible] - [illegible]

ऊंची कूद	[illegible]	[illegible]
बलराम	सुरेन्द्र	बलराम
रणधीर	बलराम	रणधीर
नरेन्द्र	रणधीर	समरसिंह
हरिवंश	नरेन्द्र	देवदत्त
इन्द्रसेन	हरिवंश	पूर्णचन्द्र
भीमसेन१२	इन्द्रसेन	भीमसेन
जयदेव	जयदेव	भीमसेन
समरसिंह	समरसिंह	[illegible]
देवदत्त	देवदत्त	
भीमसेन	भीमसेन	
	ओम्प्रकाश	
	कृष्ण	

सभाओं के सूत्रधार

[illegible] सभा — [illegible]

अवनीन्द्र (मंत्री) — शिवप्रसाद (मंत्री)

नरेन्द्र (उपमंत्री) — समरसिंह (उपमंत्री)

[illegible]

चन्द्रगुप्त	कृष्णचन्द्र १४
रामस्वरूप	इन्द्रसेन १४
विष्णुदत्त	ओम्प्रकाश
इन्द्रसेन १४	नरेन्द्रनाथ
निरञ्जनदेव	निरञ्जन[illegible]

क्रीड़ा पुरस्कार सूची

खेलें	[illegible]	[illegible]	
कुर्सी दौड़	३		
चम्मच दौड़	२		
[illegible] दौड़	३	३	
भारी दौड़	४		
अन्ध युद्ध	३	५	
२० गज की दौड़	३	३	
[illegible] पर चलना	२		
बोरी दौड़	३	३	
[illegible] दौड़	३	३	
तैरी दौड़	३	३	
चार टांग की दौड़	३	३	१
सवारी दौड़	३	३	
बाधा दौड़ (Handicap)	५		
बाधा दौड़	६	५	२
गोला फेंकना	३		
तेज़ चलना	२		
गेंद फेंकना	३		
[illegible] तैरी	३	५	
[illegible] तैरी	३		
[illegible]	१		
लम्बी कूद	२		
ऊंची कूद	३		
[illegible] कूद	५		
[illegible] युद्ध	३	२	
बोरी युद्ध	३	३	
कुश्ती	५		
कविता	५		
सान्त्वना	३		
[illegible]			

विनय — पत्रावली

सम्पादक की डाक

(राजहंस के कार्यालय से प्राप्त)

सेवा में —

संयुक्त राष्ट्रीय और मजदूर

दल के सदस्यों को —

प्रिय बन्धु गण !

आप के सहयोग और कर्तव्य निष्ठा की बदौलत राष्ट्रीय दल और मजदूर दल का गौरव कायम रहा। उस की मान मर्यादा सुरक्षित रही और राष्ट्र के सूत्र लेने में सफल हुआ।

इस प्रसन्नता के समय में मैं आप को विनीत भाव से बधाई देता हूं। आशा है आगे भी आप इसी तत्परता से और कर्तव्य निष्ठा से दल की रक्षा के लिये उद्यत रहेंगे।

भवदीय

मन्त्री

अवनीन्द्र

संयुक्त राष्ट्रीय तथा मजदूर

दल

प्रिय बन्धु गण !

आप के हाथ में अपने विनम्र सेवकों के मान करने की सब से उत्तम जो वस्तु है; वह गौरवमय आसन, वह स्वर्णमय सूत्र आप ने हमारे इन अनुभव हीन अनाड़ी हाथों में सौंपा है। आप की इच्छा के सामने, अपनी इच्छा को तुच्छ समझते हुए उस को स्वच्छ और स्वच्छ कर; हम अपना नत मस्तक करते हैं। हम विनम्र भाव से उस सहयोग - जिस के हम अधिकारी हैं - को अभिलाषी हैं; जो हमारे से पूर्व कार्यकर्ताओं को आप द्वारा प्राप्त होता रहा है। हम यथाशक्ति सभा की परम्परा और गौरव को कायम रखने में कसर न उठा रखेंगे। फिर भी सभा की उन्नति और अवनति, सफलता और असफलता आप के हाथ में है। सभा के आप स्वामी हैं, हम केवल आप की आज्ञा पालन करने वाले हैं। हम अपने सभा के पूर्व कार्यकर्ताओं से तथा वर्तमान कार्यकारिणी मंडल से विनम्र भाव से सहयोग की याचना करते हैं। हमें विश्वास है और आशा है कि हमारी प्रार्थना सुनी जायगी।

भवदीय अनुग्रहाभिलाषी

अवनीन्द्र (मंत्री)

नरेन्द्र अध्यक्ष

वाग्वर्धिनी सभा

could be reached, and A would be better off and B no worse off than if the redistribution had been effected by changing the price from OP_1 to OP_2. Therefore Professor Scitovsky's test still seems to be required, but the interpretation of it is altered, it now tells us whether a good change in distribution would be better effected by the change under consideration, or by simply redistributing money. We thus have a threefold criterion

(a) Is the Kaldor–Hicks criterion satisfied?
(b) Is the Scitovsky criterion satisfied?
(c) Is any redistribution good or bad?

All the possible combinations of answers may be set out in a table thus:

TABLE I

Case No	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*
CRITERIA								
Kaldor–Hicks criterion satisfied?	Yes	Yes	Yes	Yes	No	No	No	No
Scitovsky criterion satisfied?	Yes	Yes	No	No	No	No	Yes	Yes
Any redistribution good?	Yes	No	Yes	No	No	Yes	No	Yes

Before examining the inferences to be drawn from the eight possible combinations of these criteria some further discussion of the meaning of a good and bad redistribution is needed. If we say that a move from Q_1 to Q_2 (in Fig VI) would be a good redistribution, what exactly do we mean? We mean that any purely distributional change (by which is meant the direct transfer from one individual to the other of sums of money or sets of goods) which would produce a point which is distributionally indifferent to Q_2 would be a good thing It is assumed that there is at least one point attainable by direct transfers from Q_1 which is regarded as distributionally indifferent to Q_2, and in which everyone is better off, or no worse off, than in Q_2, or in which everyone is worse off, or no better off. In the discussion above it has been assumed that H is such a point—so that to say that Q_2 is distributionally better than Q_1 is to say that H is better than Q_1. Similarly to say that Q_1 is distributionally better than Q_2 is to say that J (or some similar

ally equal, and then one gets £5 per annum more and the other stays the same, it need not be wrong to say that they are still economically equal But this would, of course, soon cease to be the case if there were a cumulation of such shifts

point within the upper ellipse) is better than Q_2 For consistency, it is required that if H is better than Q_1, then J is worse than Q_2.

At this stage it may be helpful to introduce the device of a 'utility possibility' diagram (Fig VII consists of four such diagrams). On each axis the utility of an individual is measured on an arbitrary ordinal scale The curves drawn show the maximum utility which can be attained by one individual given the utility level of the other This maximum utility level depends upon what we assume remains fixed If the set of goods, *and* the prices, remain fixed then the utility possibility curve traces out the utility levels attained by each person as direct transfers of goods are made from one to the other A different curve will correspond to each relative price. This is the case of Fig. VI But much broader interpretations are possible. If the prices are allowed to vary as one moves *along* the curves, then they trace out the maximum utility level possible for one person given that of the other, on the assumption that each point corresponds to a point on the contract curve as defined above. The curves then represent the maximum utility possibilities of a given set of goods A movement along the curve results from direct transfers of money between the individuals A different curve then corresponds to each different set of goods On a still broader interpretation, both prices and production, and hence the set of goods, can be allowed to vary as one moves along the curve by means of direct transfers of money A curve then represents the utility possibilities of a given endowment of factors of production and a different curve corresponds to each different endowment In this case various assumptions can be made about the allocation of the factors of production It can be assumed that the 'optimum' conditions of production and exchange are satisfied, in which case the curve represents the *maximum* utility possibilities Alternatively one might take the curve to represent what would actually happen as money was shifted between the individuals, the points being determined by the actual price and output policies which would be followed by the productive units in the economy

Which interpretation is relevant depends upon the problem being analysed For instance, when dealing with the valuation of the national income it may be convenient to inquire into the utility possibilities of a fixed set of goods But this is rather a special case For any practical application one would normally be interested in the utility levels which would actually result from shifting

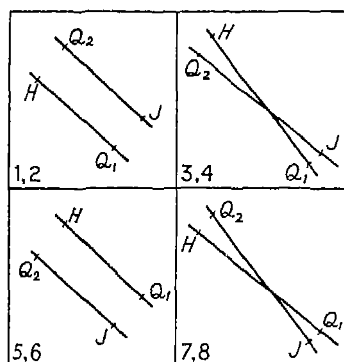
money about—in which case it is the set of factors of production, and price and output policies, which are assumed constant as a move along the curve takes place.

Whichever interpretation is used the formal properties of the diagrams remain the same. No significance attaches to the shape of the curves (this is because the utility scales are arbitrary), except that they must slope down from left to right, if they are used to analyse problems in which it is impossible to make one man better off without making another worse off. But, while the formal properties are unchanged, the meaning attached to the redistributive element of a change varies according to the determination of the utility possibility curves Thus if it is said that redistribution would be improved by moving from Q_1 to Q_2, that has to be taken to mean that a point on the utility possibility curve of Q_1, which is either south-east or north-west of Q_2, is better than Q_1. The location of this point and hence the exact sense attached to 'redistribution being good' depends upon what is assumed to remain constant as one moves along the utility possibility curve. The closest approximation to the ordinary meaning would seem to be when the curve represents the utility possibilities of the factors of production under given price and output policies. For then we are assuming that if someone says that a change from Q_1 to Q_2 would be distributionally good, he means that a point which would *actually* have been reached by shifting money, and where everyone would be worse off, or everyone be better off, than at Q_2, is better than Q_1.

Each diagram is applicable to one of the four possible combinations of the Kaldor–Hicks and Scitovsky criteria, the relevant case numbers of Table I being shown in the bottom left-hand corner In each case if the curve through Q_2 passes north-east of Q_1, the Kaldor–Hicks criterion is satisfied. and if the curve through Q_1 passes south-west of Q_2 then the Scitovsky criterion is also satisfied In addition, if redistribution is good (as in cases 1, 3, 6, and 8), the left-hand point on any line is better than the right-hand, and vice versa if redistribution is bad It must be remembered that H now stands for any point in the south-west or north-east quadrants of Q_2 which would be judged distributionally indifferent to Q_2, and similarly for J in relation to Q_1. In what follows, any movement along the curve through the initial point Q_1 will be referred to as a 'redistribution', while any movement along the curve through Q_2 will be referred to as a 'compensation'

The question which we now seek to answer is whether a change from one line to the other is a good thing (According to the interpretation of the curves the change might be merely a change of price, as in Fig VI, or a change involving a new set of goods)[1] This cannot be clearly answered until it has been decided how free one is to move along each curve, i e make purely distributional changes. One can assume that no distributional changes are possible, i e. that one cannot move from Q_1 to H, or from Q_2 to J.

FIG. VII



This needs some elaboration It has been argued that, in the real world, complete compensation, so that no one would be left hurt by a change, would rarely if ever be possible But if it is *not* possible to reach a point like J (in the north-east or south-west quadrant of Q_1) from Q_2, then the formal argument is unaltered by saying that no compensation is possible, for Q_2 can, where necessary, always be regarded as the point which would be reached after all practical compensation had been paid, if it was desirable to pay it Similarly it might normally be quite impractical to find a point like H which was attainable from Q_1, and Q_1 can then be regarded as the point reached after all practical redistribution had been allowed for Sometimes, therefore, the most realistic assumption to take would be that only the two points Q_1 and Q_2 are actually attainable Let us call this Assumption A But the most general case is certainly where all four points are attainable (Assumption B).

[1] See p 102

Take first the assumption that only Q_2 and Q_1 are attainable (Assumption A). Where only two points are attainable the question whether the change should be made is of course the same as the question whether welfare would be increased Inspection of Fig VII shows that the answers to the question of whether the change should be made are as shown in Table II, which gives the eight possible combinations of the criteria, and the inferences to be drawn.

TABLE II

Case No	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*
CRITERIA								
Kaldor–Hicks criterion satisfied?	Yes	Yes	Yes	Yes	No	No	No	No
Scitovsky criterion satisfied?	Yes	Yes	No	No	No	No	Yes	Yes
Any redistribution good?	Yes	No	Yes	No	No	Yes	No	Yes
INFERENCE								
Should the change be made?								
Assumption A	Yes	?	Yes	No	No	?	No	Yes
Assumption B	Yes	Yes	No	Yes	No	No	No	Yes

In cases 1, 3, and 8, Q_2 is shown to be better than Q_1. In cases 1 and 8, Q_2 is the best of the four points. in case 3, H is better than Q_2, but *ex hypothesi* is unattainable In cases 4, 5, and 7, Q_1 is better than Q_2, although, in case 4, J is better than Q_1 In cases 2 and 6, the result is indeterminate. Thus, in case 2, Q_1 and Q_2 are both better than H and worse than J, and vice versa in case 6, there thus being in neither case a relation established between them.

The table shows clearly that neither the Kaldor–Hicks nor the Scitovsky criterion are, alone or together, sufficient for an increase in welfare In case 4 the Kaldor–Hicks criterion is satisfied, but the change would decrease welfare The same is true of the Scitovsky criterion in case 7 Used together they indicate a change in case 2, which could result in a decrease in welfare Nor is either of them alone, or together, a necessary criterion On the other hand, both the combination of the Kaldor–Hicks and the redistribution criteria, and the combination of the Scitovsky and the redistribution criteria, are sufficient (but not necessary) for an increase in welfare

But the question still arises as to whether these criteria (which, in this case, are welfare criteria) have any point to them at all. It has been argued that where no compensation or redistribution is possible, i.e where the criteria are criteria of welfare, they are useless on the following grounds [1] They require that someone should make the judgement that Q_2 is distributionally better (or worse) than Q_1—which is to be taken to mean that H is better (or worse) than Q_1 But, it is argued, if this someone, whoever he may be, can make judgements of this kind, then he can say directly whether Q_2 is better or worse than Q_1 Hence the criteria are redundant [2] There is no doubt that this criticism would be overwhelming if it were true that our 'someone' already had well-ordered preferences between all configurations of the economic system, and if one could describe to him exactly the configuration which would result from the change under discussion In fact, of course, people do not have such well-ordered preferences nor would it be possible to describe exactly what goods, &c , every individual would be getting after the change, still less can we say *how much* utility or welfare each individual would be getting after the change Given that one cannot describe the state each or every individual would be in after the change, the best one can probably do is to say that the situation would be much the same as would result from, say, transferring £100 of net income from one to the other, except that both (or all) would be better off than if this was actually what was done If this is accepted, then even though the actual question asked is in terms of a comparison of Q_1 and Q_2, a point like H comes in as an essential intermediary and it cannot be said that the Scitovsky part of the criterion is redundant

Now take the second assumption B[3]—that all four points are attainable. This is more involved because the question whether welfare would be increased by a move from one point to another ceases

[1] C Kennedy, 'The Economic Welfare Function and Dr Little's Criterion', *R E S*, 1952/3, no 52

[2] The same criticism arises when we come to consider the 'Valuation of Social Income' in Ch XII—where it will be further discussed

[3] These, A and B, are not the only two possible assumptions In the first edition of this book the only set of inferences drawn from the eight cases was based on the assumption that redistribution before the event was possible—but not compensation after it This produces for the eight cases the following answers Yes, ?, No, No, No, No, No, Yes—as in Table I of the first edition It now seems to me that this was a rather arbitrary assumption, as various critics have pointed out

to be the pertinent question when more than two points are involved. Consequently the criticism discussed above does not arise, since one needs to know which is the best point, and how to reach it. The diagrams show that in cases 1, 2, 4, and 8 the best point is on the curve through Q_2, and that in the remaining cases it is on the curve through Q_1 In cases 1 and 8 the change should be made without compensation, in 2 and 4 it should be made with compensation In cases 5 and 7 the *status quo* should be preserved, while in 3 and 6 there should be only redistribution Table II again shows that neither the Kaldor–Hicks nor the Scitovsky criterion are by themselves sufficient or necessary The combination of the Scitovsky criterion with either the redistribution or the Kaldor–Hicks criterion *is* sufficient—but the same is not true of the combination of the Kaldor–Hicks and the redistribution criterion

For both assumptions only the combination of the Scitovsky criterion and the redistribution is 'reliable' (in the sense that if both are satisfied then welfare is increased, and the change should be made, whichever set of assumptions is taken). The combination remains reliable if it is assumed that compensation alone is possible, or if it is assumed that redistribution alone is possible but it is not 'efficient' in the sense that it picks up all cases in which a change should be made

This seems to be as far as one can take the subject of the 'welfare criteria' Before discussing their value, if any, one important limitation must be noticed If the Kaldor–Hicks and the Scitovsky criteria conflict, that indicates that the utility possibility curves cut between the two points under consideration—and if they agree, then the utility possibility curves do not cut between the two points But no indication is given either way as to whether the curves cut elsewhere So long as the subject under discussion is limited to the question whether a particular change should be made, and if so whether compensation should be paid or not, or if the change is not made whether there should be some redistribution in lieu, this does not matter. But if wider questions are raised, it may matter very much. Take, for instance, Assumption *B*, case 4. The diagram shows that the change should be made and compensation paid, in order to reach the point *J*. But now imagine the curves extended to the right and cutting again It was held to be a good thing that transfers should be made from Mr *A* to Mr *B*—so as to travel from Q_2 to *J*—and it might well be considered a good thing that

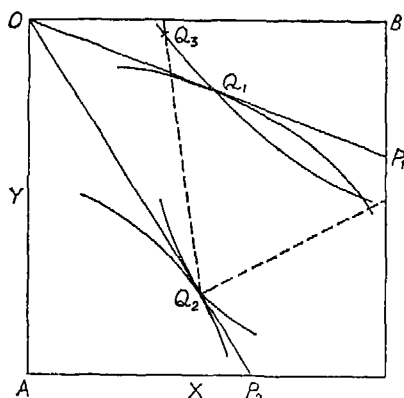
Mr. A should pay over still more to Mr B, so moving farther to the right along the curve But by then another intersection with the Q_1 curve could have taken place in which case the change should never have been made.

It is very necessary to bear this limitation in mind. But equally one should not be too heartbroken, for the human mind cannot in practice contemplate all the possibilities In practice, economic policy very largely presents itself as a series of choices as to whether certain changes should be made or not Sometimes the change is mooted for its distributional effects, in which case it is usually relevant to consider whether there are other ways of redistributing wealth so as to produce what would be regarded by the supporters of the change as an equally good distributional effect—but which might make almost everyone better off than if the change were made (as in cases 3 and 6) Or, the change may be mooted because it is thought to be in line with some vaguely conceived general economic policy, in which case its distributional effects will also almost invariably enter as an argument—and all our cases become in principle relevant. What in practice is not usually very helpful in either of the above cases is to suggest that what is really being aimed at may be some more radical redistribution of wealth, in which case any decision on the mooted change should be deferred The truth is that economic change proceeds largely by considering suggested improvements one at a time. If, as a result, some changes are made which, in the light of subsequent decisions, should not have been made, that is too bad. But it cannot always be helped.

Let us now try to sum up this discussion so far as we have got First, neither the Kaldor–Hicks nor the Scitovsky criterion, either alone or together, can possibly be taken to be a criterion of welfare. Either, taken in conjunction with a judgement that the redistribution involved is good, can be taken as a sufficient (but not necessary) criterion of an increase in economic welfare But, where full compensation and redistribution are possible, then criteria for an increase in welfare are not pertinent, for what is then required is a criterion for whether the proposed change is desirable having regard to the possibilities of compensation and redistribution Where redistribution and compensation are possible, but where wider redistributions than those involved in the change are not in question, then the Scitovsky criterion is sufficient (but not necessary) for the change to be desirable if the redistribution involved is also good—

while the Kaldor–Hicks criterion is not sufficient even combined with a judgement that the redistribution is good. We can thus say that an economic change is desirable (and increases welfare) if it causes a good redistribution of wealth, and if the potential losers could not profitably bribe the potential gainers to oppose it—always assuming that no still better change is therefore prejudiced.

FIG. VIII[1]



The next step is to discuss the question of when one can know whether either the Scitovsky or the Kaldor–Hicks criterion is satisfied. Now economic theory tells us nothing except when the change is from a 'sub-optimum' to an 'optimum' position[2] Only in that case can one know on *a priori* grounds that the behaviour line or plane to which one moves is anywhere higher than that from which one starts Let us therefore ask, first, whether the Kaldor–Hicks criterion is always satisfied for any movement to a Pareto 'optimum'. This requires rather a careful answer Consider Fig VIII Q_1 is the initial position where *A* behaves as a monopolist setting a high price (OP_1), but with an obligation to let *B* trade freely at that price (as in Fig VI). Q_1 is not on the contract curve, i e is not a Pareto 'optimum' position Q_2 is on the contract curve, we may suppose it to be reached by the government dictating the price

[1] The broken lines give the loci of the points which *A* and *B* would select as the price line OP_2 was shifted to the right

[2] Some theorists have thought otherwise. The question is discussed in Ch IX and in App IV

OP_2, so that it is in both A's and B's interest to trade freely. Now can B overcompensate A while free trade and the price OP_2 is preserved? The answer may well be 'No', for as the price line OP_2 is shifted to the north-east (as B hands over compensation), no other point may be found where both persons' desire to trade can be satisfied. In other words, no equilibrium point other than Q_2 may exist within the box given the price OP_2 In the diagram the two broken lines represent paths A and B might take as OP_2 was shifted parallelwise to the north-east In the case depicted there would be excess demand for Y relative to X If B were forced to exchange as much as A wanted after having paid compensation, then the transfer required to compensate A could well leave B worse off—e g. the point Q_3. Thus the payment of compensation may either be incompatible with equilibrium, or, if an additional condition is introduced, which yields a determinate solution, then there may be no possibility of compensation In general, it is true that the Kaldor–Hicks criterion is satisfied for a movement to an 'optimum' position only if it is supposed that the compensation is to be paid in a manner which does not itself upset the 'optimum' conditions Thus, if the Kaldor–Hicks criterion is to be satisfied, the change must not be merely a change of price—but a change to a variable price which neither party can influence monopolistically. A more general example of this is where the movement to an 'optimum' position results in a change in the collection of goods produced Where this happens then it is not necessarily true that the new collection of goods could be distributed in such a way as to make everyone better off, or no worse off This is because, as compensation is paid, the said collection of goods ceases to be the collection appropriate to the changed distribution or, in other words, the 'optimum' conditions of production and exchange would be violated unless the collection of goods was allowed to change as compensation was paid What can be said is that if the change is described merely as a change which brings all the optimum conditions into play, and keeps them in play, then the Kaldor–Hicks criterion is satisfied. If the change is described in any other way (such as a change of price, or a change in the collection of goods produced) then the criterion may not be satisfied.

Discussion of whether the Scitovsky criterion is satisfied is much simpler It is always satisfied for a change to an 'optimum' position, however the change is described This is because no question of

redistribution *from* the 'optimum' position arises. In the Scitovsky criterion, the hypothetical redistribution considered is from the 'sub-optimum' position Thus in Fig. VIII it is obvious that A, the potential loser from the change of price OP_1 to OP_2, could not bribe B to oppose the change, because, since Q_2 is an 'optimum' point, any other point on the behaviour line of B which passes through Q_2 necessarily lies on a lower behaviour line of A than that passing through Q_2 Thus if it is a change of price which results in an 'optimum' position, then the Scitovsky criterion is satisfied for that change of price. If a change in the collection of goods is entailed, then it is true that the old collection would not be sufficient to make everyone as well off as he is in the new situation.

We have said that *a priori* economic theory can tell us that the Scitovsky and Kaldor–Hicks criteria are satisfied only if the change is a change to a position in which *all* the optimum conditions of production and exchange are satisfied But, of course, that does not mean that one can never form the judgement that a change to a non-optimal position would not in fact satisfy one or both the criteria

We show in Chapter XII that an increase in the national income as measured by the prices reigning after the change ($\sum P_2 Q_2 \geqslant \sum P_2 Q_1$) ensures that the Scitovsky criterion is satisfied,[1] in that the output of goods prior to the change could not have sufficed, however distributed, to make everyone as well off as they actually are after the change Now one may sometimes be able to tell, with fair confidence, before the event, that a certain change in production would increase the national income in this sense. Unfortunately, unless one can tell more than this, one has not found a very good reason for making the change For what is required in order that the Scitovsky criterion be fulfilled *in the relevant sense* is that without the change the given factors of production could not have produced *any* set of goods which would have made everyone as well off as after the change This does not mean that a considerable increase in the national income cannot be taken as evidence that the change should be made on our criterion but it cannot prove it to be fulfilled.

It is shown in the same chapter that an increase in the national

[1] Subject, of course, to many comparatively unrealistic assumptions, such as that all individuals are consistent, all goods are chosen by individuals, that the national income has been correctly added up, &c

income never proves that the Kaldor–Hicks criterion is satisfied.[1] This does not mean of course that one could never guess that it would be satisfied But it does not follow that because a change would increase the national income before compensation, it would still do so after compensation This is especially likely to be the case in view of the fact that in practice it is impossible to shift money about without disturbing the 'optimum' conditions. This fact, contrariwise, makes it easier to be sure that the Scitovsky criterion is satisfied—since the more 'inefficient' the means of redistribution the easier it is to know that mere redistribution could not have produced a position in which everyone would be as well off as they would be if the change under consideration were made.

To sum up the above discussion, any change which brings one to an 'optimum' position is sufficient to ensure that the Scitovsky criterion is fulfilled for that change. and the fulfilment of that criterion is sufficient to ensure that welfare is increased, provided that the distribution of wealth is not adversely affected, and to ensure that a redistribution of money income could not have made everyone as well off as they would have been after the change. Comparing non-optimum positions (which in practice is all that ever can be done), we saw that economic theory cannot tell us whether either the Scitovsky or the Kaldor–Hicks criterion would be fulfilled for a move from one to the other, but from empirical evidence it may be possible to tell, although an increase in the national income is not sufficient evidence.

So far as any kind of change is concerned, if the Scitovsky criterion would be satisfied and wealth would be more favourably distributed as a result of the change, there is no need to worry about the Kaldor–Hicks criterion. But, secondly, if redistribution without the change were impossible, and that caused by the change were favourable, then the change should be made if the Kaldor–Hicks criterion were satisfied, even if the Scitovsky criterion were not. Thirdly, if wealth would be less favourably distributed as a result of the change, one should look to see whether the change-plus-compensation could not make everyone better off finally all this is subject to the overriding consideration, that it is unwise to make good changes if still better ones are thereby prejudiced.

We have already discussed the value judgements which underlie the above analysis On the whole, I think, one can fairly safely

[1] See pp 220–1

assume that they would be acceptable to a vast majority of people. But certain factual assumptions are also presupposed, and, in discussing these, for more practical purposes, it is useful to make a distinction between a *policy* of putting into operation all changes which satisfy the Scitovsky (or Kaldor–Hicks) criterion and which have only an insignificant effect on distribution, and putting into effect changes which also pass the criterion, but do have a significant, but not bad, effect on distribution. The policy might be an acceptable one, and, indeed, a possible one, because there are probably many changes such that very few people would worry about the income redistribution which they would cause. Where the redistribution would only be small, it would be difficult to say how it would alter, and for this reason a majority of people would very likely be prepared to judge that it would be as likely to be good as bad, in which case a change which passed the criterion would probably be good in most people's opinion But, nevertheless, the policy rests on the factual assumption that these small shifts in distribution would not be cumulative in some particular direction. This may be a dangerous assumption, and therefore the policy might be a bad one, if we did not have good reason to suppose that the distribution effects of those changes, which we chose to include under the policy, would be random. In fact, one cannot really ever ignore distribution Even if shifts in distribution are small, and therefore judged not to be bad, one wants to have some reason to suppose that they would be random. If the distribution effects were not random, then, after the policy had been in operation some time, we would have a significant redistribution of income which might be good or bad. If it proved to be bad, it might or might not be possible to compensate If the redistribution were good, we might still find that the policy had been economically wrong, and that it would have been better simply to redistribute money.

The goodness of such a policy also, of course, rests on the assumption that individuals are sufficiently consistent As we saw in Chapter III, it is obvious that they are not likely to be very consistent. Moreover, since it is a policy we are judging, the period of time in question is a fairly long period, in which case the consistency of even average individuals becomes very doubtful.

Given all these doubts, it seems eminently clear that we could not have much confidence in such a policy unless it only included

changes such that, in theory, the gainers would be able greatly to overcompensate the losers If the potential gains were great enough, most people would be prepared to tolerate losses, so long as they did not last for long Almost anyone would, for instance, agree that it would be a mistake to suppress important inventions. On the other hand, where the potential gains are large, it is unlikely that real income distribution would not be significantly affected Thus many people would hold that the industrial revolution decreased economic welfare for a considerable period of time. My conclusion is that one could have little confidence in the sort of policy suggested by Professor Hicks.[1]

Turning now to changes which do affect income distribution significantly, we have the same fundamental value judgements, and we still, of course, require the assumption that individuals are consistent We do not, however, require the assumption that income redistribution effects would be random Also, since we are now dealing with isolated changes, and not with a policy, a rather shorter period of time may be relevant, in which case the consistency assumption is not so unplausible Nevertheless, given that I accepted the fundamental value judgements, and thought that the change would shift real income distribution in a good direction, I would certainly require that the potential gains should be fairly large before I could say with any confidence that the change would be better than a policy of income redistribution alone

On the other hand, as already noted, in practice a policy of redistributing income by shifting money is impossible without violating the 'optimum' conditions This means that often one might want to recommend changes which would cause a good redistribution, even although the Scitovsky criterion was not satisfied. In which case, *a fortiori*, one would want to recommend them if it were. What this all adds up to is that the question whether income redistribution would be definitely good, or could be made good by compensation, is a more important part of the criterion than the Scitovsky part, unless it is obvious that the magnitude of the theoretical gains (the amount by which the gainers could conceivably overcompensate the losers if everyone was an economic

[1] A M Henderson has suggested ('The Pricing of Public Utility Undertakings', *Manchester School*, Sept. 1947, p 230) that the randomness of distribution effects is an assumption which has been presupposed in economic doctrine ever since Adam Smith This seems to me to be an inadequate reason for continuing to make such a dangerous assumption.

man) is great. This is most likely to arise where the change is one which might have a cumulative effect, as opposed to a once-and-for-all effect, on the output of goods. I certainly do not want to suggest that it is necessarily wrong to accept bad redistributions, or not press for good ones, in the name of economic growth

In the latter part of this chapter we have rather loosely spoken of 'recommending', and used the word 'should', and so on. These phrases are justified in so far as we have introduced ethical premises, but it is important to remember that we have ruled out all ethical considerations which do not relate to the amount of goods and services consumed by individuals Thus our recommendatory conclusions must not be regarded as absolute recommendations, or unqualified value judgements, we also require that all non-economic effects of the change should be neutral, or beneficial; or, if bad, they must be outweighed by the good economic effects

Finally, we must make one very important point. When discussing a good economic policy, we tried to aim at general acceptability, but that does not, of course, imply that what is generally acceptable is good. We only aim at general acceptability in order that the analysis should be of interest to as many people as possible We are not thereby absolved from making our value premises explicit if we want to avoid the charge of moralizing Since value judgements are presupposed, it follows that, in the last analysis, whether a policy would be a good one, or a change increase economic welfare, is purely a matter of personal opinion This is particularly obvious in the case of changes which affect income distribution significantly Each person must answer for himself the question 'Would this change affect real income distribution favourably or unfavourably?' This does not mean that welfare economics must be useless It only means that people who differ on the subject of distribution will seldom agree on the desirability of economic changes This is simply a fact which we have to accept. Even so, welfare economics may still help people who disagree on the subject of distribution to agree on the best way of bringing about any given redistribution

It may be useful to conclude this chapter by briefly tracing the relation which the above exposition of the foundations of welfare economics bears to utilitarian welfare economics. The first important point is that it makes the ethical implications of the subject perfectly explicit Secondly, it does not beg the question in favour

of any particular ethical creed. It provides therefore a more general framework than utilitarian economics, which can be fitted into it by suitable translations. Thus a utilitarian may, if he wishes, always interpret 'on a higher behaviour line' as 'more satisfaction' Likewise, he may interpret 'a good redistribution of income' as 'a redistribution which would increase happiness' But if one does not believe that the view, that economics is about satisfactions, is sufficiently plausible, one can merely judge that it is a good thing that a person be in a preferred position. Also, since the above schema is explicitly ethical, it follows that the notorious question of whether interpersonal comparisons are value judgements ceases to be of any importance In order to reach our ethical conclusions, we have to judge that a certain redistribution would be *good*, and not merely that it would increase happiness. But interpersonal comparisons are not, in fact, merely value judgements, and people will generally use these factual comparisons to help them decide the value question whether a certain redistribution would be good or bad.

Since we believe that the essential purpose of the economics of wealth, happiness, or welfare is to make recommendations, and to influence people, it follows that it should be put on an explicit, and not merely an implicit, value basis. We therefore prefer the above schema to that of utilitarian economics. But, having said this, we must add that the utilitarian scheme of things was more logical, more acceptable, and less misleading than that version of the New Welfare Economics which was based merely on conceivable over-compensation.

CHAPTER VII

THE NEW WELFARE ECONOMICS (2): THE ECONOMIC WELFARE FUNCTION

THERE remains for consideration the system of welfare economics favoured by the first school of thought mentioned in the previous chapter This system was first worked out by Professor A Bergson in his article 'A Reformulation of Certain Aspects of Welfare Economics'.[1] On this formulation the 'optimum' conditions of production and exchange are derived as *necessary* conditions for 'maximum welfare'. In the last chapter we developed a *sufficient* criterion for a desirable economic change, and no such concept as 'maximum welfare' was used. It follows that if the 'optimum' conditions are deduced from this later kind of basis, they must be deduced as *sufficient* conditions for an economic improvement, and not as *necessary* conditions for achieving 'the maximum'. This is one of the distinctive differences of emphasis between the two systems.

The Bergson–Samuelson system proceeds by way of a 'social welfare function'.[2] In other words it is postulated that all possible configurations of the social system are arranged in order of value. This means that, if the system is ever to be applied, we require someone—let us, for the moment, call him 'superman'—to answer the question 'Is X better or worse than Y?' for all conceivable values of X and Y. The value judgements of this 'superman' must be consistent in the same sense as an 'economic man' must be consistent, i e if he says A is better than B, and B better than C, he must say that A is better than C

But no conclusions about the real world can be reached if one tries to talk about everything at once So let us replace the 'social welfare function' by an 'economic welfare function' [3] This means that it is proposed to take into account only the economic differences between each pair of possible situations. The word 'economic' is defined as in Chapter I The order in which the situations are arranged on the economic welfare scale may, of course, differ from the order in which they are arranged on the social welfare scale. We cannot therefore say that a situation of greater economic

[1] *QJE* (1937–8), pp. 310–34

[2] Cf. Samuelson, op cit, pp 219–28

[3] Cf Bergson, op cit

welfare is a better situation in the eyes of 'superman'. But, for the sake of brevity, we shall use such words as 'good', 'bad', and 'ought' The resultant value judgements must therefore always be regarded as qualified by the condition that the non-economic differences between the two situations must be a matter of ethical indifference, or they must support the value judgements made as a result of a consideration only of the economic differences. The phrase 'in the opinion of "superman"' ought also to qualify the value judgements

To make any progress some assumptions must be made about the form of the 'economic welfare function' In other words, we require some value postulates Let us, then, postulate that 'welfare' is an increasing function of the 'well-being' of 'individuals', i.e. whether we move up or down the scale of 'economic welfare' depends on whether 'individuals' become 'better off' or 'worse off' (if this is not postulated, there is no problem of how 'goods' ought to be allocated to 'individuals', and therefore the 'optimum' exchange conditions could not be derived) We also postulate that 'economic welfare' is greater if one 'individual' is 'better off', and no 'individual' is 'worse off' Then, in order to relate 'better off' and 'worse off' to economic theory, it must be stipulated that an 'individual' is 'better off' if he is 'on a higher behaviour line', and similarly for 'worse off' [1]

It follows that 'economic welfare' is greater if some 'individual' is 'on a higher behaviour line', and if no other 'individual' is affected at all. This suffices for the deduction of the 'optimum' conditions of production and exchange as *necessary* conditions for attaining the highest possible value of the economic welfare function [2] It can be shown that if any one of these conditions is not fulfilled, then it is conceivable that some 'individual' should be made 'better off', without any other 'individual' being made 'worse off'. But the fulfilment of all these 'optimum' conditions of production and exchange is still not sufficient to ensure that the highest conceivable value is attained. They suffice only for the attainment of a Pareto optimum.[3] The final condition for achieving

[1] This last postulate will be slightly modified later

[2] In Appendix III we throw some doubt on whether these conditions should be regarded as necessary for a Pareto optimum if these doubts are accepted, then it follows that they are not necessary for *the* optimum But, in conjunction with an ideal distribution of welfare, they would remain *sufficient* for the optimum

[3] See p 84 above

the 'optimum' (among all the Pareto 'optima') is that there should be an ideal distribution of 'welfare' among the 'individuals'. It thus has to be imagined that 'superman', besides laying down the value postulates already shown to be required, also defines an ideal distribution of 'welfare'.

As has been said, the exponents of the above approach to 'welfare' economics have neglected to define sufficient conditions for an improvement in 'welfare'.[1] But one sufficient condition is, of course, implied, i e. that all the 'optimum' conditions, including the ideal distribution of welfare condition, be put into operation at once. Thus the neglect of sufficient conditions for an increase in 'welfare' tends to turn the system into the theory of socialist economics.[2] This assimilation of welfare economics to socialism is evidently suggested by the lack of any discussion of when it might be a good thing to put one 'optimum' condition into operation, even if some of the others were not fulfilled, thereby suggesting that it is a case of all or nothing To a certain extent this emphasis on the 'optimum' conditions as each being necessary for *the* 'optimum', but not sufficient for an 'improvement', is undoubtedly an accident of the mathematical analysis employed. But, whether accident or not, the implication of all or nothing is there, unless the author takes care to let it be understood that he does not intend to imply anything at all.

Nevertheless the conclusions which were reached in Chapter VI could have been derived from an economic welfare function defined by means of the value postulates proposed above. If one has the same premises one can, naturally, reach the same conclusions. The difference between the two approaches is as follows. To speak of an economic welfare function implies that every situation can be said to be 'better than', 'worse than', or 'in different to' every other situation,[3] this implies that there is a best or a number of 'equally best' situations; which, in turn, implies an ideal distribution of welfare On the other hand, the situational analysis, developed in Chapter VI, presupposes only that a limited number of points

[1] It is not quite true that sufficient conditions for an improvement were altogether neglected Professor Bergson (*Q J E* article, p 333) in effect concludes that increases in the 'national dividend' would increase economic welfare if they were positively correlated with good changes in welfare distribution

[2] It is noteworthy that the article on welfare economics by Professor Bergson, in *A Survey of Contemporary Economics*, is entitled 'Socialist Economics'

[3] Cf. Samuelson, op cit, p 221

(four) are, necessarily, thus orderable.[1] The situational analysis is derivable from an economic welfare function, and, since the reverse does not hold, the economic welfare function can be said to be more general. But the advantages of increased generality are very dubious—except from the mathematician's point of view—if the economic welfare function cannot be applied. It seems to me that the functional terminology is advantageous only if one can significantly speak of maximizing economic welfare, using the term in its ordinary sense Therefore since the maximization of welfare implies the possibility of an ideal distribution, let us pretend that we are starting off with an ideal distribution, as defined by 'superman' whoever 'he' may be. It follows that one cannot deduce that any change should be made unless, after compensation, it makes someone better off, and no one worse off.

But we have already seen that, if the actual compensation of all losers is required before any economic change can be said to be good, then probably no good economic changes can occur No change of any significance in the real world could ever be made without harming some people. Also compensation can never be more than rough and ready, partly because the behaviour maps of individuals (even supposing them perfectly consistent) are not known, and partly because the effects of any important economic change may be extremely widespread, and the number of individuals involved very great

It will be remembered that the payment of compensation was also criticized on the ground that it betrayed a conservative bias But the present case is very different, for an ideal distribution has been presupposed. If we start with an ideal, conservatism is, by definition, the best policy. But what does this concept of an ideal distribution really mean? We have seen that the ideal distribution was to be defined by 'superman' But nobody could *say* what distribution of real income, or welfare, would be ideal We have no terminology for describing welfare distributions The definition, therefore, must be ostensive. We have to suppose that 'superman' would point to a certain configuration of the economic system, and say '*that* represents the ideal welfare distribution'

It is time that something was said about the interpretation of

[1] It may be suggested that we have a partial economic welfare function even if only two situations are assumed to be orderable If one is determined to use mathematical language, at whatever cost in clarity, this can, of course, be said

this word 'superman'. Could 'superman' be interpreted, for instance, as public opinion? It is difficult to imagine how public opinion could define an ideal distribution Take a more or less democratic country such as England. Some might consider the distribution of welfare in England now to be ideal, but many more would not. Howsoever it was altered, there would still be many who would not find it ideal Indeed, it seems doubtful whether it would ever be possible to get two people, let alone a majority, to vote 'Yes' in answer to the question 'Is the present distribution of welfare ideal?', no matter how welfare was distributed. Thus, in a democratic state, it seems absurd to suppose that public opinion could define an ideal distribution.

Could 'superman' be interpreted as Parliament or the Cabinet? This idea leads to the suggestion that economists, in a state with a democratic government, must always take the prevailing distribution as ideal, because the government would have changed the distribution if it had wanted to This suggestion rests on two fallacies It is certainly a fallacy to suppose that the government must approve of the prevailing distribution, merely because it has the power to alter it This is like saying that one must always want to be in the place where one is, even if one happens to be motoring through it But the present suggestion also rests on the highly undemocratic idea that the government always knows what is best —or that it alone can say what is in the public interest Those economists who are not civil servants are permitted to criticize the aims, policies, and opinions of the government.

It thus appears that the 'ideal welfare distribution' could at best be defined only in a totalitarian state, where economists, or other subjects, never question the value judgements of their rulers But even in such a state it might not be safe to assume that the distribution of welfare was always just what the rulers wanted. In the real world, the redistribution of welfare is a slow and difficult business And, even if economists in such a state could assume that distribution was ideal, there would still be great difficulty in making changes which did not upset that distribution The difficulties involved in the idea of trying actually to compensate all losers would not be removed. The distribution of welfare would inevitably shift, in which case it would still be necessary to inquire whether the resultant redistribution was good or bad. We can only conclude that the 'economic welfare function' would be inapplicable even

in an absolutist state, and doubly so in a democratic one, where there would be as many (vague) welfare functions as there are individuals. It can be regarded only as a formal device necessary to a perfectly general abstract system of 'welfare', which bears no relation to practical policy.

Now the third school of thought—the Kaldor–Hicks–Scitovsky school—concentrated not on developing the necessary conditions for Utopia, but on providing a sufficient criterion for an economic improvement It is clear that this kind of approach is suggestive of reform rather than revolution, of patching up rather than tearing down and building anew But the criteria developed were not acceptable because they ignored income distribution. It was also not clear that the ethical, recommendatory, nature of welfare economics was recognized We therefore introduced value judgements into the analysis The two fundamental value judgements were (*a*) that welfare is an increasing function of the well-being of individuals, and (*b*) that an individual is better off if in a chosen position These two value judgements are identical with those which must be used by the exponents of the 'economic welfare function', if all the traditional 'optimum' conditions are to be deduced.

But there the resemblance ends The Kaldor–Hicks school of thought made welfare independent of distribution. We refused to accept this latter stipulation, and introduced a new sufficient criterion for a desirable economic change The use of the phrase 'increase of economic welfare' is made dependent on the judgement that the resultant redistribution would not be bad This means that, in our system, unqualified conclusions can never be reached, if it is desired to remain neutral on matters of welfare distribution But, by leaving open the question of whether any shift in distribution would be good or bad, we avoid having to make the useless presupposition of an 'ideal welfare distribution'. The application of the theory therefore becomes more general [1] Anyone can decide for himself whether the projected redistribution would be good or bad, and therefore whether (in theory) the change ought to be made or not One of the least tolerable features of the ideal distribution concept is that it limits the use of the theory to those who happen to believe that the distribution of welfare is ideal.

[1] In welfare function terminology people who would define widely different functions may agree on the desirability, or otherwise, of a given change People need not agree about everything to agree about one thing

The other important difference is that the 'optimum' conditions need not be derived as necessary conditions for 'maximum welfare'. 'The maximum' is a concept without any possible empirical significance, and therefore it seems preferable not to use it It is more meaningful to derive the 'optimum' conditions as sufficient conditions for an improvement, without attempting to define a maximum position. The 'economic welfare function' is the basis of a perfectly valid system. It has been criticized, not on logical grounds, but on the ground that it cannot be applied. We prefer the less highly formalized, less comprehensively rationalistic, situational kind of analysis Of course, we may be forced to decide that even this kind of analysis is hopelessly inapplicable. But at least it seems to offer more hope of application.

Let us review the progress made so far in this book. We have developed a formal sufficient criterion for deciding when a change is economically desirable It is desirable if (*a*) it results in a good redistribution of welfare, and if (*b*) the potential losers could not bribe the potential gainers to vote against the change This criterion may be expressed, in other words, as follows *A change is economically desirable if it results in a good redistribution of welfare, and if a policy of redistributing money by lump-sum transfers could not make everyone as well off as they would be if the change were made* It is important to remember that this is a sufficient criterion only it is not suggested that changes which do not satisfy it may not also be desirable. Secondly, it is conceivable that some changes which satisfied it might prejudice still better changes so the qualification 'so long as it is judged that still better changes are not thereby prejudiced' should be made One thing that the criterion does, is, as it were, not to give the green light to all changes which increase welfare a change which would increase economic welfare, but can be shown to prejudice a still better position attainable merely by redistribution, is not given the green light So one important kind of alternative policy, i.e. redistribution is partly taken account of —but the criterion cannot ensure that yet other kinds of policy, which would result in still better positions, might not be prejudiced by a change which it permits.

With this qualification the criterion is an adequate basis for welfare economics, because, as we shall see in the following chapter, it permits the deduction of the traditional 'optimum' conditions, as sufficient conditions for a desirable change, given that the

fulfilment of the condition would not have an unfavourable effect on distribution. Whether a certain economic change would be good, or not, thus depends on a value judgement about income distribution. It is a matter of opinion whether any given shift in distribution would be good or bad, and therefore always a matter of opinion as to whether some economic change is desirable or not. This does not in the least imply that welfare economics must be useless It may enable people who largely agree on matters of distribution to agree on the desirability of certain specific changes. And even if an economist thinks that some suggested change would affect distribution unfavourably he can still make some recommendation He can, for instance, say that if the government is determined to shift distribution in that way, then it would be better to do it by making the suggested change rather than by some other means But this does not, of course, imply that he would be prepared to say that the change would increase welfare

The above analysis presupposes only two value judgements, both of which we believe to be widely acceptable. The first is that the welfare of the community is an increasing function of the welfare of individuals The second is that an individual is better off if he is in a chosen position We found that value premises are essential to welfare economics because welfare conclusions *are* value judgements, and because value conclusions require value premises Our criterion for a desirable economic change thus resulted from the introduction of a value judgement about welfare distribution into the Kaldor–Hicks–Scitovsky 'situational', or 'partial', analysis.

We believe that anyone who accepts the two fundamental value judgements, and our definition of the word 'economic', must accept the above criterion. This completes our discussion of the foundations of welfare economics These foundations are, in our opinion, sound. If welfare economics is found to be useless, it is not because there is anything shifty about the philosophical or logical foundations We claim to have stated the required postulates in a clear, precise manner. It only remains to accept or reject them. It will be presumed, in what follows, that they are accepted

The criticisms of welfare economics which will occupy us in subsequent chapters will be neither logical, nor linguistic, nor philosophical. We shall be concerned with the realism of the theory, i e with the question of how far the defining characteristics

of our concepts are realized in practice We have already, to a limited extent, been concerned with this question of realism It has been seen that the exact application of the 'in a chosen position' criterion to the real world, in a form which is theoretically useful, demands that individuals should be perfectly consistent 'economic men'. But any exact application was obviously out of the question We therefore asked ourselves whether the behaviour-line analysis of individual economic behaviour was *sufficiently* realistic for us to have a reasonable degree of confidence in the deductions made from such a basis.[1]

A tentative answer to the above question was given in Chapter III It was decided that the behaviour-line analysis applied very badly to actual individuals On the other hand we believe that most people would still be prepared to accept the two fundamental value judgements, even given that the word 'individual' is not to be taken absolutely strictly It was concluded that if 'individual' is interpreted in a vague way as referring to average men, or small homogeneous groups, then it would be very rash to conclude that the facts of inconsistent behaviour, taken alone, render all prescriptive economics useless.

The above discussion of the reality of one of our essential factual assumptions has been rather tentative We have spoken vaguely of an analysis applying 'well' or 'badly', and talked of 'a reasonable degree of confidence' Why do we have to make such vague judgements? Why cannot the question, whether the theory applies well enough, be definitely answered? What are the usual scientific tests for when an assumption, or a hypothesis, is good enough?

In science the above sort of question is answered pragmatically Assumptions are good enough if they yield conclusions which can be tested, and are found to be true—or, if not precisely true, are better than nothing, and better than results yielded by any other hypothesis. Evidently, in order to answer such a question as 'Does the behaviour-line analysis apply well enough?' the conclusions which result from its application to the real world should be tested. But the conclusions are welfare conclusions. Are such conclusions testable? In principle, 'Yes' Having selected an individual who

[1] The applicability of the behaviour-line analysis does not depend only on the degree of consistency displayed by individuals It also depends on how far economic goods are divisible The problems arising from the unreality of the assumption of perfect divisibility will be discussed later, in Chapter X

approved of our value judgements, we could then make changes which satisfied the criterion of desirability, and ask him whether the resultant situation was better or worse than the initial one But from this description of how the conclusions could be tested in principle it becomes fairly obvious that they could not be tested in practice The reasons are (*a*) that no controlled experiment is possible. Even if our guinea-pig said that an improvement had resulted, we should be unable to rule out the possibility that the improvement was the result, not of the changes deliberately made, but of concomitant changes—and (*b*) the canvas is too large for any individual to be able to observe it all, and so make a reasonable judgement

Physicists do not have to worry about whether the concepts of the deductive systems, which they use, have any recognizable interpretation In physics, it does not, for instance, matter in the least whether or not electrons are identifiable objects which behave in the postulated manner What are important are the conclusions in terms of physical objects, which can be verified or falsified. But social scientists, in lieu of readily testable conclusions, must concern themselves with the extent to which the defining characteristics of their concepts realize themselves [1]

Thus the question of whether the assumptions of welfare economics are good enough (when they are obviously not very good) is a matter of individual judgement—and never a matter of proof Since, in subsequent chapters, we shall be questioning many of the factual assumptions, implied by any application of welfare economics to practical policy, this fact should be borne in mind So far we have been concerned only with one assumption, that of con-

[1] The fact that our theoretical conclusions cannot be tested, and that we therefore have to fall back on testing our postulates, marks an important difference between welfare economics (and, I think, all the social sciences) and the physical sciences This has been well put by F S C Northrop in his article 'The Impossibility of a Theoretical Science of Economic Dynamics', *Q J E* lvi, 1941–2, as follows 'the difference in scientific method is marked Physics tests its deductive theory indirectly by empirically checking its theorems, Economics, directly by empirically confirming its postulates In Physics one believes in the validity of its postulates because their deductive consequences, the theorems, are experimentally confirmed, in Economics, one believes in the validity of its theorems because they are the logical consequences of the immediately confirmed postulates ' As comment we may add that this passage seems to apply perfectly to welfare economics, but not to positive macro-economics We must also add that our postulates are not, in fact, confirmed—at best they are confirmed to have a grain of truth—and so we may, or may not, believe in the truth of the theorems

sistency of choice Whereas my judgement is that we cannot simply dismiss welfare economics on the ground that this is an absurd assumption, nevertheless I think that its obvious unreality is alone sufficient to make it foolish to be concerned with minutiae. Before applying our formal criterion we should at least require that the losers would appear to be, in theory, incapable of bribing the winners to oppose the change by a fairly handsome margin

The fact that it is a matter of judgement whether the abstract welfare theory applies well enough to the real world to justify its application to live issues, implies, I think, that welfare economists cannot, even if they wish to, avoid all responsibility for deciding questions of value Since welfare judgements about the real world are value judgements, it follows that the question whether the abstract theory applies well enough for us to risk such conclusions is a value question. When an economist says 'If you accept such and such premises, then these conclusions follow' he must remember that the given premises will be understood to run in terms of real individuals, &c. But the economist himself works in terms of rather unreal abstractions, he must accordingly remember that his practical conclusions are suspect The non-economist should be warned of the assumptions which the economist slips in in order to be able to deduce his practical conclusions from the given premises In practice, to warn the non-economist of all the assumptions made, would be to teach him a lot of economic theory. Thus economists themselves have largely to decide whether the theory is good enough They cannot free themselves from all responsibility The distinction sometimes drawn between economist *qua* economist, and economist *qua* moralist, is an unreal one.

In the next chapter the 'optimum' conditions of production and exchange will be developed, both as necessary conditions for a maximum, and as sufficient conditions for a desirable economic change From what has been said above, however, it is clear that the latter sense of the word 'optimum' is the only one which is regarded as being of any possible practical significance [1] We shall also show under what conditions these 'optimum' conditions would, in theory, be fulfilled. We shall endeavour to present the theory as applied theory. Even so we shall only take the unreality

[1] It is also shown in Appendix III that considerably weaker assumptions about individual behaviour are required if we are content to derive the 'optimum' conditions solely as sufficient conditions for an improvement

of a limited number of assumptions into account—to wit (*a*) the assumption that individuals are independent and free to choose between different collections of goods, and that they make consistent choices, and (*b*) the assumption that production units are independent We shall, in fact, try to show with what degree of plausibility it can be said that these 'optimum' conditions are based on individual preferences In later chapters the applicability of welfare theory will be discussed from a wider viewpoint.

CHAPTER VIII

THE 'OPTIMUM' CONDITIONS OF PRODUCTION AND EXCHANGE (1)

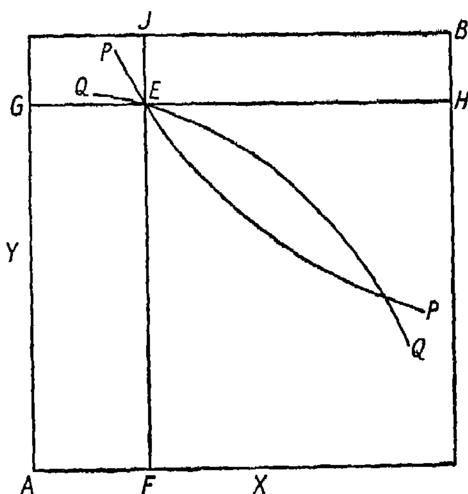
1. THE 'OPTIMUM' CONDITIONS OF EXCHANGE

WE postulate a fixed stock of 'goods' to be distributed between a number of 'individuals'.

1 (*a*) *The marginal rate of substitution between any two 'goods' must be the same for every 'individual' who consumes them both.*

For two 'goods' and two 'individuals' this can be proved with the aid of a box-diagram of behaviour lines. Thus, in Fig. IX, *A*'s

FIG IX



behaviour lines are convex to the origin *A*, and *B*'s to the origin *B*. Adjacent sides of the box represent the total amounts of the two goods *X* and *Y* to be divided between *A* and *B*, and thus every point represents a certain division of the goods between them. At the point *E*, for instance, *A* gets *AF* and *AG* of *X* and *Y* respectively, and, similarly, *B* gets *BJ* and *BH*. The point *E* is one at which the slopes of *A*'s and *B*'s respective behaviour lines (*PP* and *QQ*) are different Whenever this is the case, it can be seen by

inspection that it must be possible for one to reach a higher curve, while the other remains on the same curve, or also reaches a higher one. It follows that equality of the marginal rate of substitution is a necessary condition of 'maximum welfare'[1] This two-person, two-good case can be generalized to apply to *n* persons, and *n* goods The proof of this, and of all similar generalizations of the other 'optimum' conditions, is left to the mathematical economists.[2]

Putting the above condition into operation, when it is not already fulfilled, is, in theory, a sufficient condition for an increase in welfare, so long as the distribution of welfare is not thereby made worse. This follows because any movement to a position of tangency of behaviour lines is a movement which satisfies the Scitovsky criterion Once such a position is reached, as a result of some change, it is impossible that the Kaldor–Hicks criterion should be satisfied for the reverse change away from the tangency position This is the same as to say that the Scitovsky criterion must be satisfied for any change to a point of tangency of behaviour lines

In what circumstances is this 'optimum' condition fulfilled? In Chapter II we saw that a behaviour line must be tangential to any fixed price line at the chosen point. This condition is therefore satisfied if individuals are free to choose, and if there is only one price in the market, because, then, all behaviour lines must be tangential to the same price line, and therefore have the same slope. The fixed price must, of course, be such that all the goods are sold This requirement is not necessary when it is assumed, as in Fig IX, that all the goods have already been distributed before exchange takes place

Earlier we promised to modify the postulate 'an "individual" is "better off" if he is "on a higher behaviour line"'. The modified postulate is as follows 'an "individual" is "better off" if he is "on a higher behaviour line" and if his well-being is not unfavourably

[1] Sometimes the only positions in the box which satisfy the condition that it must not be possible for one to reach a higher line without the other falling to a lower one will be on the boundaries of the box In such a case it cannot be said that equality of the marginal rates of substitution is necessary for an 'optimum' The same also applies if behaviour lines are permitted to be kinked The modifications which need to be made to the 'optimum' conditions in these cases are dealt with in Appendix III.

[2] Reference may be made to Bergson, op cit, Lange, 'Foundations of Welfare Economics', *Econometrica,* July–Oct 1942, Samuelson, op cit, pp 229–40

affected by changes in the well-being of other "individuals" The object of this modification is to remove the assumption that individuals' welfares are completely independent Professor Bergson has shown that the 'optimum' conditions do not require this assumption of independence. To quote:

In so far as Marshall and Pigou conceive of welfare as the sum of the utilities of different households, their formulation involves an additional decision on ends, namely one to the effect that the interrelations in the utilities of the different households have a zero social value. The magnitude of the change in the community's welfare, resulting from a change in the budget position of any one family, does not depend at all on the living standards enjoyed by other households

For purposes of analyzing the optimum allocation, however, it is unnecessary to refer to this special and obviously very dubious case, it has been shown that all propositions of interest can be deduced from the more general function in the formula given above [1] The demonstration of this point would seem to be one of the more interesting doctrinal gains resulting from the introduction of the welfare function[2] into the analysis.[3]

It must be noticed that Professor Bergson does not merely claim to dispense with the independence assumption in arriving at the barren truism that the ratio of the marginal social values ought to be the same for any two goods whichever individual consumes them, but also in arriving at the condition that the marginal rate of substitution ought to be the same How is this possible, in view of the fact that, if the independence assumption is not made, one cannot say that economic welfare is increased if some 'individuals' are 'on higher behaviour lines', and none are on lower ones? The answer is that if, say, A and B (as in Fig IX) could be raised to 'higher behaviour lines', then, even if their increased welfare has such external diseconomies of consumption[4] that the

[1] The 'formula given above' is the economic welfare function, $W = F(U_1, U_2, U_3 \ldots)$, where U_1, U_2, U_3 represent the utilities of the different households as they see them, and W, the welfare of the community, is understood to be an increasing function of these utilities

[2] Yet the hedonistic calculus formulation can very easily be modified to take account of economies and diseconomies of consumption, as Professor Bergson himself, in effect, showed (cf his *Q J E* article, p 313, n 9) The 'doctrinal gain' may have resulted from the introduction of the welfare function, but it is not inconsistent with utilitarian economics

[3] A Bergson, 'Socialist Economics' in *A Survey of Contemporary Economics*, ed Ellis See also Bergson, loc cit, *Q J E* (1937-8), p 313, n 9.

[4] See Ch III

general welfare would be reduced, it would still be possible to increase general welfare, in that one could reduce A and B to their former welfare level by removing purchasing power, and then distribute the potential benefit to those individuals whose external diseconomies of consumption, if any, do not completely offset that benefit Thus, unless all individual increases in welfare have more than offsetting external effects, which would obviously prohibit any increase in general welfare, this 'optimum' condition of exchange is deducible without the use of a postulate which implies independence. In fact, given an 'economic welfare function', we do not require to translate 'benefit' as 'on a higher behaviour line' in order to use the behaviour-line analysis in the deduction of the 'optimum' conditions as necessary conditions of 'maximum welfare' We may notice that Professor Bergson's criticism of Marshall and Professor Pigou applies better to the subsequently developed Kaldor–Hicks analysis, in which independence is required, because no economic welfare function is introduced, and income distribution is ignored.

From the above it follows that there is only a potential increase in welfare if we put A 'on a higher behaviour line' and no other 'individual' on a lower one To make the potential 'increase' actual, it is necessary to ensure that the potential 'gain' is distributed to the right 'individuals' But, although one can thus deduce this 'optimum' exchange condition as a necessary condition of 'maximum welfare', how can one ever know that putting it into operation would be a sufficient condition for an increase in welfare? Now the magnitude of external consumption effects varies with the distribution of welfare Therefore they will be taken into account in deciding whether the fulfilment of the condition would cause a not unfavourable redistribution The condition that the distribution of welfare must not be adversely affected *includes* the condition that the potential 'gains' resulting from putting this 'optimum' exchange condition into operation must be distributed to the right 'individuals'. This can be seen as follows. The redistribution which the change would cause, even allowing for the external consumption effects, would not, in itself, decrease welfare. Therefore a change which would result in this redistribution, and be such that, from the point of view of the new redistribution of welfare, those who had gained could overcompensate those who had lost, must increase welfare

We have, however, dealt only with one kind of interdependence, the kind which makes a man worse off because his neighbours get better off, without altering his consumption pattern But a change in the welfare of others may also alter a man's consumption pattern, and this difficulty cannot be removed in the formal analysis. Also, there is yet another kind of external consumption-effect which attaches to the consumption of a particular good, whoever consumes it, and not to the welfare level of particular consumers. Thus the consumption of Rolls Royces, whoever owns them, may give considerable displeasure to some people who do not own them, and considerable pleasure to others. Again, a beautiful house may have important external economies of consumption. This kind of interdependence does not upset the 'optimum' conditions of exchange, but it may, as we shall see, upset some of the 'optimum' conditions of production That this is so is intuitively clear. Even if Rolls Royces are displeasing (or pleasing) to those who do not own them, *it still follows that those who want them most should* own them. But if they cause displeasure, or pleasure, to others their production should be curbed or encouraged as the case may be.

But, finally, the external effects may depend upon who consumes the goods. Radios cause displeasure to others in the hands of owners who live in crowded places and play them loudly but not in other hands The presence of such external effects upsets the 'optimum' conditions of exchange, and it ceases to follow that a fixed stock of goods is 'ideally' distributed if sold at a single price which equates supply and demand moreover, no conceivable system of indirect taxes or subsidies would meet the case, in fact, some restriction of individuals' freedom of choice is usually the only possible manner in which such anti-social behaviour can be restrained

If we include 'leisure' as a 'good' in the behaviour-line analysis, we can express another 'optimum' condition of exchange

1 (*b*) *There must be equality of the marginal rate of substitution between 'leisure' and any given consumption 'good' for all 'individuals' who 'work' and consume that 'good'*

As before, if this condition does not hold for every pair of 'individuals', it would be possible for one of them to reach 'a higher behaviour line' without the other falling to 'a lower behaviour line'

But, as we saw in Chapter III, there is a great difficulty about fitting leisure into a behaviour-line analysis, because it is not, in general, the case that the amount of work which a man does is his free choice. It may be true that, if a man has to work eight hours or not at all, he may take his leisure in the form of slackness, and thus try to adjust his subjective marginal rate of substitution of leisure for the good in question to their relative prices, as determined by the price of the good and his marginal earnings Where a man is paid by time, and where he cannot, for reasons of production technique, be allowed to vary his working time as he chooses, this 'optimum' condition could only be brought about in this way It cannot reasonably be claimed that the consistency which a man shows in his working time is a sign that he has constant preferences. It is rather a sign of lack of choice at the margin.

There is also the difficulty that there are many different kinds of work of varying degrees of unpleasantness A man cannot normally split his work up between many different jobs, in the way that a consumer can split up his consumption. The rate at which he would be willing to exchange leisure for the given good would, of course, depend on the relative pleasantness of the job he was doing. We really need a different leisure corresponding to every different kind of work Taking into consideration the different kinds of work means that we require another 'optimum' condition, to wit:

1 (*c*) *The marginal rate of substitution of one kind of 'work' for another must be equal for all 'individuals' who do both kinds of 'work'*

The unreality of this condition is manifest It is, however, true, in a sense, that both working time and relative wage-rates are partly determined by individual preferences But the preferences are usually collective rather than individual To put it in another way, the trade union seems to be the relevant 'individual' in the case of choices about work, while actual or typical individual workers, or their families, are more relevant to the consumption of ordinary goods. Yet, in condition 1 (*b*), the same interpretation of 'individual' is required, whether he is consuming or working The marginal rate of substitution referred to cannot therefore be precisely determined by observing the free choices of any real individuals

Thus the value postulate 'an individual benefits if he reaches a higher behaviour line' leaves us rather in the dark Ought hours of work to be removed from collective bargaining, and become again the object of more individual choice? Ought the decline in production, which would probably occur as a result of the increased difficulty of factory organization, to be tolerated? The theory cannot give us much help here, unless we make a number of *ad hoc* value judgements to cover the points raised. Moreover, these difficulties are far from being trivial. It is not very consistent to lay great emphasis on individual choice in the consumption-good market, and very little emphasis on individual choice in the labour market. But that is what economic theory seems to have done.[1] Yet most individuals spend far more time working and being leisurely than they do consuming objects which can be 'brought into line with the measuring rod of money'.

But, in order to be able to progress with our analysis, we must assume these difficulties solved, for the remaining 'optimum' conditions depend on the fulfilment of those already discussed. We can suppose that certain *ad hoc* value judgements are given. It may, for instance, be laid down that a man's welfare is greatest if he works a forty-hour week The relative diswelfare of different jobs may be considered to be in line with relative wages determined in some given way. We come now to the 'optimum' conditions of production.

II THE 'OPTIMUM' CONDITIONS OF PRODUCTION

We must now give up the postulation of a fixed stock of goods. But all the following 'optimum' conditions depend on the behaviour-line analysis of 'individual' behaviour, if it is assumed that welfare is a function of the well-being of individuals This assumption, which is, of course, implicit or explicit in almost the whole of the theory of economic welfare, will be made throughout Consumption, although there is no longer a fixed stock of goods, can now be thought of as split up into periods, in which a fixed stock of goods, which was produced in the preceding period, is allocated to individuals For the present we ignore savings and investment, and we assume constant technique, and constant managerial

[1] Cf E H. Phelps-Brown, 'Prospects of Labour', *Economica*, Feb 1949, p. 7.

and workmen's ability and zeal. The first 'optimum' condition of production is, then, as follows·

II (*a*) *The ratio of the marginal products of any two 'factors of production' must be the same for every 'good' in the production of which they both co-operate.*

In other words, the rate at which one 'factor' can be substituted for another, without altering the amount of 'goods' produced, must be the same in all lines of production. The validity of this condition can be shown by reference to Fig. IX The lines *PP* and *QQ* must be reinterpreted as iso-product curves *A* and *B* are now 'goods', not 'individuals'. *X* and *Y* are 'factors', not 'goods' Thus, the point *E* now represents a situation in which *AF* of factor *X*, and *AG* of factor *Y*, are devoted to the production of *A*. Similarly, *BH* of *Y*, and *BJ* of *X*, are devoted to the production of *B* The slope of an iso-product curve at any point represents, for a given distribution of the factors, the rate at which *X* can be substituted for *Y* in the production of *A* (or *B*) without altering the amount of *A* (or *B*) produced. Iso-product curves are, like behaviour lines, assumed to be convex to their respective origins, which implies that the rate at which one factor can be substituted for the other decreases as the substitution goes on (i e. more and more *Y* (*X*) is required to compensate for the loss of a given amount of *X* (*Y*) as the amount of *X* (*Y*) used is reduced) If an iso-product curve failed to be convex over part of its length, then, if the price ratio of the factors remained constant, no combination of factors represented by any point on the concave part of the curve would ever be chosen, since a higher output could, in that case, be obtained at the same cost. If the iso-product curves were nowhere convex to the origin, only one of the two factors would be employed, and the 'optimum' conditions for their best usage would, then, be irrelevant The condition of equal marginal substitutability is therefore an 'optimum' and not a 'pessimum' condition of production As before, it can be seen, by inspection of Fig IX, that, if we are not at a point of tangency of iso-product curves, then the production of *A*, or *B*, or both, could be increased without increasing the total amount of any factor used.

Now, if the production of one good can be increased, without that of any other declining, then it must (by the definition of a behaviour line) be possible to raise some 'individual' or 'individuals'

to higher behaviour lines, without affecting any other unfavourably, so long as we choose the right 'individuals' and the right 'goods'.[1] Therefore this is a necessary condition of 'maximum welfare'.

We must remember, however, that we have extended the behaviour-line analysis to include 'leisures' Therefore 'factors' cannot be interpreted as human factors of production Formally, we require the value premise that economic welfare is not affected by shifting 'factors' between jobs. This premise cannot apply to human factors if we include, as we do, work or leisure in the behaviour-line analysis

Now the above analysis requires that 'production units' be independent, i e. there must be no external economies or diseconomies of production We saw that if the iso-product lines in the diagram were not tangential, then more of both 'goods' *A* and *B* could be produced without withdrawing 'factors' from other uses. It was for this reason that it was said that the production of *A* and *B* could be increased without any decrease in the production of any other good But this does not necessarily follow, if we do not assume independence, because, analogous to external diseconomies of consumption, there might be external diseconomies of production. Thus an increase in the production of *A* and *B* might cause a decrease in the production of *C*, even though *C* still retained the same 'factors' of production. If *everything* which a 'firm' actually produced could be accounted to it as part of its 'product' (positive or negative), and if everything it consumed could be accounted to it as a 'factor', then every 'firm' must, by definition, be independent. But, in the real world, such perfect accounting is not possible, and therefore we have to reckon with external economies and diseconomies in applying our analysis If, given a uniform system of accounting, we knew which firms had external economies and diseconomies, we could ensure that production would be increased by making marginal factor substitutabilities equal, for, if they were unequal for two firms which had external diseconomies of production, then, at the same time as we made them equal, we could withdraw factors of production, so that only the products of other firms with no external diseconomies of either production or

[1] We must choose the right 'individuals' and 'goods', because, as we have seen (p 132), both individuals and goods may give rise to external diseconomies of consumption

consumption would actually be increased But how are we to estimate these external effects? Given a 'superman' who could fill these otherwise empty boxes,[1] and set values on the external economies and diseconomies, then, and only then, could we say that putting the above 'optimum' condition into operation, even given that the distribution of real income is not unfavourably affected, would increase economic welfare Without such a series of *ad hoc* valuations, we can only know that, if the above condition is not satisfied, then it must be possible to increase economic welfare, but we cannot be sure that putting the condition into operation will not actually make matters worse In other words, such external economies and diseconomies of production and consumption are irrelevant to the deduction of this condition as a *necessary* condition of 'maximum welfare'. But necessary conditions are not very interesting It is *sufficient* conditions for improvements that we really want, and those external economies and diseconomies, which may attach either to the production or the consumption of a particular good, prevent us deducing the present condition as sufficient for an increase in economic welfare. They must therefore be assumed to be absent

There is another kind of external economy and diseconomy which we must notice. It is possible that the production of some 'good' could be increased without there being less of any other 'good', and still it might not be possible to increase general welfare, if the firm whose production was increased also produced 'nuisances' which were not counted in the analysis Formally, one can get round this difficulty by postulating that the concept 'good' covers everything produced But, again, in practice, we cannot rely on ideal accounting, and anyway 'nuisances' are not normally objects of individual consumption, for, if they were, they would be charged to the firm, therefore they cannot be very well fitted into the behaviour-line analysis. The traditional examples of these 'nuisances' are smoke, noise, and smells Uncharged-for benefits may also occur, but are not so obvious. One might suggest those entertaining advertisements which at least do something to offset the ugly ones It is clear that these effects help to destroy the precision of our analysis. Ideally we require that they should all be valued, and charged to the firms.

Ignoring the external effects mentioned above, we may ask in

[1] Cf J H. Clapham, 'On Empty Economic Boxes', *E J* (1922)

what circumstances the present 'optimum' condition would be fulfilled. If a producer can exchange one inanimate factor for another at a fixed price, which he cannot influence, then, if he is to produce any given output at the minimum possible cost, he must make the marginal substitutabilities of the factors equal to their relative prices Therefore, if each producer has to pay the same relative prices for factors, then the 'optimum' condition is fulfilled This marginal analysis can only be applied to divisible factors of production, and obviously can never be precisely fulfilled in a world in which demand, technique, and factor prices may be all changing One can say, however, that, in order to give producers the best chance of getting as near to this static ideal as ignorance of the future permits (or makes desirable), one ought to see that every producer is faced with the same relative factor prices.

To include animate factors in this condition would be to demand that, for instance, a man and a machine should be paid the same relative wages on a farm, and in a coal-mine. Since we have excluded this, a valuation must be put on the relative diswelfare of work under various conditions We have already seen that this valuation cannot be very plausibly extracted from a behaviour-line analysis of free choices on the part of actual individuals Nevertheless, our 'superman' may want us to take 'individual preferences' into account in some sense How could we best interpret this requirement?

We might take relative wages, as determined by collective bargaining. But 'superman' might want us to try to get nearer to real individuals' preferences than that. One possibility would be to set relative wages at the point at which there is no tendency for either line of production to grow at the expense of the other. But should we take the short or the long run? There are large costs involved in labour movement in the short run which are avoided in the long run through expansion by juvenile intake, and contraction by retirement, the long run avoids the actual movement of individuals. It would appear, then, that we should take the short run if we want to get as close to actual individuals' preferences as possible But, then, these would only be the preferences of the marginal men, and would take into account movement costs, which should presumably be excluded when we are simply considering the relative disutilities of the two jobs. There is no reason to suppose that they are representative of the relative preferences

of intra-marginal men In fact, these, if human nature does not change very much, are much more likely to be represented by the wage-rate which would result in an absence of long-run labour movements.

The alternative is, of course, that 'superman' would cut through these difficulties by setting his own valuation on the relative real costs of different occupations In any case, we must suppose that this question is settled in the best way. Then the relative prices between men and other factors are determined for each industry, and each producer ought to bring, as before, these relative prices into line with his iso-product curves.

It may be noticed that the present 'optimum' condition is the only one of the 'optimum' conditions in which the word 'optimum' need not refer to welfare If this condition is not fulfilled for all factors of production, including workers, then *production* could, in theory, be increased The production of the whole economy consists of a heterogeneous collection of things and services. One such heterogeneous collection can be strictly said to be greater than another only if there is more of at least one kind of thing, and no less of any kind. Thus, we can say that production could be increased, without any increase in resources, or in the number of hours worked, if the 'optimum' condition is not fulfilled for all factors of production (we ignore the production of nuisances) We should, however, avoid saying that production is inefficient if the above condition is not fulfilled, even for non-human factors To say 'production is inefficient' strongly implies that it would be a good thing if production were made efficient This is not necessarily the case. To make this condition operative would not necessarily be an improvement, because a higher level of production (even with no change in the amount or kind of work done by any worker) may entail less welfare To sum up, as with the 'optimum' exchange conditions, the present condition is a necessary condition of 'maximum welfare', but it is only a sufficient condition for an improvement if (*a*) the 'optimum' exchange conditions 1 (*a*), 1 (*b*), 1 (*c*), are not disturbed, (*b*) if the distribution of real income condition is not adversely affected, (*c*) if there are no external diseconomies of production, and (*d*) if there are no external diseconomies of consumption (of the kind which attaches to the consumption of a particular product) We come now to the second of the 'optimum' production conditions.

II (*b*) *The marginal rate at which one 'good' can be transformed into another must be equal to the 'individuals'' common marginal rate of substitution of one for the other*

This condition can, again, be illustrated by reference to Fig. IX if we reinterpret it The line *QQ* must now be thought of as the locus of all those collections of the two 'goods' *X* and *Y* which, with a given set of 'factors', could just be produced if the 'factors' were always combined in the production of both *X* and *Y* according to the 'optimum' condition II (*a*) above This line is usually known as a transformation curve Its concavity towards the origin *A* implies a diminishing rate of transformation of one 'good' into the other The line *PP* now stands for one of the behaviour lines of any one of the 'individuals' who consumes both *X* and *Y* (If the 'optimum' exchange conditions are satisfied, then the slope of the behaviour line at the point *E* must, since *E* is supposed to be a point of equilibrium, be the same for all 'individuals') It can now be seen by inspection that, if the slope of the transformation curve is not equal to the slope of the behaviour line, then the relative production of *X* and *Y* could be altered in such a way as to enable *A*, and all other 'individuals', to reach higher behaviour lines.[1]

The above 'optimum' condition is not valid as a sufficient condition for an increase in welfare unless all the exchange conditions, and the production condition II (*a*), are also satisfied (or unless some other value judgements have been introduced to take the place of 'individual preferences' as a value criterion) These other 'optimum' conditions are necessary conditions of the 'optimum' on their own account, but require that distribution is not thereby made worse if it is to be sufficient for an increase in economic welfare to put them into operation The present 'optimum' condition requires, however, that all the preceding 'optimum' conditions should already be satisfied if it is to be necessarily a good thing to put it into operation [2] It is therefore more shaky than any of the others The difficulties engendered by external economies and diseconomies are also present, but in a more acute form. The previous

[1] The modifications required if individuals' equilibrium positions are boundary ones, or if behaviour lines are kinked at the equilibrium point, are explained in Appendix III

[2] But it requires more than this it cannot really be considered as a separable sufficient condition from the next condition to be discussed, II (*c*) Neither of the two taken alone can be regarded as a sufficient condition even if all the remainder are satisfied This is shown to be the case on page 163

'optimum' condition of production was a necessary condition for an 'optimum', even if external diseconomies were present These external effects only came in when we were considering whether it would be a good thing to put the condition into operation In the present case, however, the presence of external production and consumption effects, or nuisances, means that this condition would not even be a necessary condition for an 'optimum' at all It would, then, at best be an approximation to such a condition.

The problem of the valuation of labour also becomes more serious Let us suppose that the fulfilment of this 'optimum' requires firm *A* to expand at the expense of firm *B*, which expansion necessitates the movement of labour, if the optimum condition II (*a*) is to remain undisturbed. Suppose that the value judgement is given that wages should be determined in accordance with workers' preferences, and that our best interpretation of this rather vague judgement is that relative wages ought to be such as to result in a long-run equilibrium in the supply of labour to different firms. It follows that labour would not be induced to move in the short run. The fulfilment of the present 'optimum' would, then, be impossible in the short run But, if the wage-rate was allowed to rise in the short run, that would mean revising our previous decision. If wages are such as to induce the marginal worker to move in the short run, then they are not in accordance with the average worker's preferences. (We may add that, if wages are allowed to rise in the short run, then 'price everywhere in the same proportion to marginal cost' does not fulfil the present 'optimum' condition—see below) Perhaps the best way of preserving this 'optimum', and keeping in line with individual preferences would be to pay the marginal workers a lump sum in order to induce them to shift, not charging this to the expanding firm, and keeping wages in line with the long-run equilibrium relative wage (if that could be discovered) But the truth of the matter is that the instruction, to take individual preferences into account, cannot be at all precisely interpreted in the matter of the supply of labour.

Assuming that all previous 'optimum' conditions are satisfied, we may now ask in what circumstances the present 'optimum' would be fulfilled The usual answer is that it is satisfied if marginal costs are everywhere proportional to prices This follows only if the ratio of marginal costs is equal to the rate of transformation. Rents which might accrue to the factors as a result of the trans-

formation should be excluded. Suppose that wages rise in the expanding industry as the transformation is made If relative wages were in line with individual preferences before, they can no longer reflect individual preferences for the intra-marginal men, who must now earn rents. Since we have decided that it is relative individual preferences which are relevant to transformation rates, these rents should be excluded. If wages rise in the expanding industry, and marginal costs include only wages, then marginal cost will equal marginal wage-cost, and not the cost of the marginal men. In these circumstances equiproportionality of marginal cost and price is not a correct deduction from the above 'optimum' condition The Lerner 'Rule' may be substituted,[1] i e. the price of each factor ought to be everywhere in the same proportion (or equal) to the value of its marginal product. Even this will only be correct for labour (in the short run) if it has been decided that the relative wage-rate which will just induce the marginal men to move is what we mean by 'the rate which reflects individual preferences'. We have seen that this is not an altogether plausible interpretation.

We come now to the last 'optimum' production condition, which may be expressed as follows:

II (*c*) *The rate at which 'work' can be transformed into any given 'good' must equal the marginal 'individual' rate of substitution of 'leisure' for consumption of that 'good'*

Granted that there are 'individuals' who have this common rate of substitution between some given 'leisure' (corresponding to a given kind of 'work') and the consumption of some given good, then this 'optimum' may also be illustrated by means of Fig. IX, if we again reinterpret it. The line *PP* now maps *A*'s behaviour with respect to some given 'leisure' *X*, and some given 'good' *Y*. *QQ* represents the different additional quantities of *Y* (measured from *A*) which could be produced with varying amounts of 'work' on the part of *A*, combined with given quantities of all the other 'factors'. Thus, at the point *E*, *A* has *AF* hours of leisure and consumes *AG* of *Y* *AG* is also the additional amount of *Y* produced as a result of *A*'s working for *EH* hours The concavity, towards the origin *A*, of the work-good transformation line *QQ* implies that *A*'s work is subject to the law of diminishing marginal productivity. It can be seen, by inspection, that if these two rates are not equal,

[1] Cf A P Lerner, *Economics of Control*, p 64

then *A* or some other individual could reach a higher behaviour line, without anyone else suffering, if the amount of work he did was altered If, for instance, he worked less, consuming only enough of *Y* to keep him on the same behaviour line *PP*, then an increased amount of *Y* would be available for consumption by other individuals

The validity of the above condition depends upon the fulfilment of all the 'optimum' conditions of exchange, including the two rather shaky ones associated with the supply of labour In what circumstances will it be fulfilled? It has to be assumed that the individual makes the rate at which he is willing to substitute leisure for the given good equal to the rate at which it is possible for him to make the substitution, i e to the net marginal earnings per unit of time derived from his work, expressed in terms of the given good Therefore it follows from the 'optimum' condition that the rate at which his work can be transformed into the given good (his marginal physical productivity) should be made equal to his net marginal earnings in terms of that good In terms of money, his net earnings ought to be equal to the value of his marginal product From condition II (*b*) it followed that the price of the factor ought to be everywhere in the same proportion to the value of the marginal product We now see that *if there is no marginal taxation levied on the individual's earnings*, then it follows that, in the case of labour, this proportion ought to be equality.

But it can be shown that if the business man minimizes costs, then marginal cost is equal to the price of each factor divided by its marginal physical productivity [1] Condition II (*a*) is satisfied by the policy of cost minimization provided that the factors of production are in perfectly elastic supply It therefore follows, in conditions in which marginal costs ought to be made equiproportionate to price, that this equiproportionality should be unity In other words, marginal cost should be brought into equality with price. This condition depends upon there being no marginal taxation, so that one can also conclude that no one who works, and can vary the amount of work he does, ought to pay income tax, or any indirect tax (indirect taxation is also, of course, 'ruled out' by the previous 'optimum' condition).

We have already seen that the validity of the 'optimum' condition, from which these conclusions are deduced, depends on the

[1] See P A Samuelson, *Foundations of Economic Analysis*, p 66.

'optimum' conditions of exchange being satisfied. But they also require the satisfaction of the 'optimum' condition of production II (*b*) (from which we deduce, if the supply of factors is perfectly elastic, that prices should stand everywhere in the same proportion to marginal costs) The 'optimum' condition II (*b*) itself requires the fulfilment of the optimum production condition II (*a*) We may conclude that if it is to be proved to be a good thing to make price equal to marginal cost, given the value judgements on which this analysis rests, we require:

1. that *all* the other 'optimum' conditions of production and exchange be satisfied;
2. that factors are in perfectly elastic supply,
3. that there is no income tax, and no indirect taxes or subsidies;
4. that it could be put into effect without adversely affecting the distribution of real income;
5. that there are no external diseconomies of production or consumption.

These are rather formidable requirements

III THE 'OPTIMUM' CONDITIONS OF SAVING AND INVESTMENT

Up to this point we have ignored savings and investment We will now deal with the 'optimum' conditions which may be developed in respect of them They all follow from the same value premises as those which we have already introduced We shall first deal with the two 'optimum' savings conditions, which are analogous to the 'optimum' exchange conditions. They are, in fact, exchange conditions, but the 'goods' to be exchanged are peculiar The first savings 'optimum' condition is as follows

III (*a*) *There ought to be the same marginal rate of substitution between money and any given bond or share for every individual who 'consumes' both.*

This is obviously the same as the first exchange condition, except that we here include money and bonds as 'goods'. It is, in theory, satisfied if the prices of shares, bonds, &c , are the same for all individuals

It is, however, more unlikely that an individual will have a consistent consumption pattern with respect to bonds than with respect to consumption goods, because the expected price of bonds

is liable to govern his behaviour to a considerable extent The fulfilment of this condition is therefore more shaky, as a sufficient condition for an increase in economic welfare, than is the corresponding exchange condition.

The second savings 'optimum' condition may be stated thus.

III (*b*) *There ought to be the same marginal rate of substitution between money and any given good for all individuals who 'consume' both*

Whether a man holds money or spends it, is also governed, to a considerable extent, by expected price movements. Exactly the same remarks therefore apply to this condition as applied to III (*a*) above.

IV. *The rate at which any given present good can be transformed into the same good, at some given future date, ought to be equal to the common marginal rate at which individuals are willing to substitute one for the other.*

In order to arrive at this 'optimum' investment condition, we have to make some assumptions about psychology The purely behaviouristic analysis so far adopted fails us. We have to assume that, when individuals save, they are, in effect, exchanging present money for future money [1] It then follows, by definition, that the common marginal rate at which they forgo present in favour of future purchasing power (money in favour of bonds, &c) is equal to their present *time preference*.[2] If we assume that there is no taxation on savings (i e no income tax), then this is also, by the definition of behaviour lines, necessarily equal to the rate of interest Next we must assume that all individuals have the same expectations as to the future price movements of every good which they expect to buy. Then, if we know this expected price change of any given good, we know every individual's time preference with

[1] But it must also be assumed (unrealistically) that would-be dissavers can freely exchange future money for present money by borrowing

[2] I here use 'time preference' to express the rate at which an individual is willing to exchange money now for money at some given future date This is not the usual sense, which is the rate at which an individual would be willing to exchange money now for money at some given future date *if he expected that the marginal utility of money would be the same for him at both dates* No doubt time preference in this latter sense may play some part in determining the rate of interest—but it does not seem possible to discover very easily what anyone's time preference is in this sense It is, perhaps, not a very useful concept, and I have therefore borrowed the expression to describe something different

respect to that good (i e that particular expected commodity-rate of interest) for every future period We know, for instance, that every individual would be willing to exchange one watch now for two next year, eight the next, or whatever it is.

Given similar assumptions to those made under II (*b*) and II (*c*) above, it follows that the discounted expected value of the marginal product of an investment good ought to equal the present price of that good, on the further assumption that producers have the same price expectations as consumers Similarly, it follows that investment for the future production of a good ought to be carried to the point at which the discounted expected marginal cost is equal to the discounted expected price It is obvious, however, that this is even more shaky than the condition that output ought to be adjusted until present marginal cost is equal to the present price It assumes everything the latter assumes, and much more besides. If individuals are mistaken about future prices, which they will be if they do not correctly foresee distributional and technological changes, then the condition is upset. It can, of course, be argued that ignorance of the future is inevitable, and will constitute a difficulty whatever investment principles one adopts But, on the other hand, it may be argued that individuals are not the best judges of what the future will hold

There are further difficulties. The present 'optimum' is derived by including money and bonds in the behaviour-line analysis, which makes that analysis even more dubious than otherwise We also had to assume that individuals save in order to spend in the future. But, to a certain extent, it is true that savings have an intangible yield in the shape of imagined security. It is also not the case that people save mainly to spend themselves They save (or used to save) largely for their legatees, whose preferences may be quite different to their own We also have to assume that all individuals expect the same price changes, which is very unrealistic. When risk enters in, we have to assume that investors and speculators are the best judges of the riskiness of different shares. This assumption may also be considered dubious Moreover, the interpretation of 'individual preferences' itself becomes rather difficult when we consider that almost all private saving is now done by corporations Perhaps this should be prohibited? Finally, these difficulties are in addition to the formidable ones which arise in connexion with the 'optimum' production conditions.

Given the 'optimum' savings and investment conditions, it follows that, when there is full employment, we should not interfere with the supply of money in such a way as to influence the rate of interest Full employment of all inanimate factors[1] is, of course, prescribed by the value premises which we have introduced It has, however, been thought by some writers that determination of the rate of interest by individual preferences may be inconsistent with the maintenance of full employment It has been said that the decision as to what the rate of interest ought to be is 'unavoidably political'[2] (which, on our formulation, means that another value judgement must be introduced). Recently, however, it has been shown that full employment is not theoretically inconsistent with the determination of the rate of interest by individual preferences.[3] Once given full employment, it may be preserved by ensuring that planned savings are equal to the supply of loans. This could be done (in an ideal system) by ensuring that the rate of interest rises or falls far enough to cause a variation in investment sufficient to offset any change in planned savings

A decline in spending may, for instance, be taken as a sign that time preference has shifted in favour of the future If there is no effect on the rate of interest, because of an increase of hoarding, this does not mean that it can no longer be maintained that every individual makes his time preference equal to the rate of interest It is, in fact, this adjustment which causes the decline in present spending. It does mean, however, that we can no longer say that time preference is, by the defined method of constructing behaviour maps, *necessarily* equal to the rate of interest We must here introduce a psychological explanation of behaviour if we wish to say that the decline in spending is caused by an increased preference for future goods, and to say that the supply of loans ought to be kept equal to planned savings This is because we are here dealing with a shift in behaviour lines, and, as we maintained in Chapter II, it is only when we have to consider shifts in behaviour patterns that psychological explanations enter into economics

Suppose, however, that we are not at a position of full employment. Would it interfere with individual time preferences if, say, the government borrowed from the banks and spent the money on

[1] The employment of human factors is determined by condition 1 (*b*)

[2] Cf A Lerner, *Economics of Control*, p 262

[3] F J Atkinson, 'Saving and Investment in a Socialist State', *R.E S* (1947–8).

providing free consumption goods? Would this be 'forced' consumption? Alternatively, if the government spent the money on public works, would this be 'forced' saving? The answer is clearly 'No' It cannot be said that such action would be interfering with individual preferences as to how the production of the economy should be divided between investment goods and consumption goods, because, at best, it is only true that the interaction of individual preferences can determine such an 'ideal' division for a given level of production. Thus 'forced' saving or consumption can only occur when there is inflation If people continue to try to spend more than the value, in a preceding period, of the national output of consumption goods, then the only thing which prevents a runaway inflation is 'forced' or unintended saving on the part of individuals. Suppose, then, that the government decides to increase investment when there is already full employment. This must be financed by unintended savings, or preferably by non-marginal taxation (preferably because unintended saving implies a haphazard redistribution of real income which may very well be disapproved of) Should we now say that individual preferences as to the correct amount of investment have been interfered with? The answer is, in theory, 'Yes' The 'optimum' conditions of production, and investment, together, in theory, determine the 'optimum' amount of every good to be produced, both now and at every future date Thus, to stimulate the production of future goods (given full employment) by lowering the rate of interest, or in any other way, is, in theory, to interfere with the 'optimum' conditions in just the same way as subsidizing the production of a present good out of taxation (even non-marginal taxation) is interfering with the 'optimum' conditions We must remember, however, that the concept of an 'optimum' rate of interest depends on the validity of the optimum savings and investment conditions above, and we have seen reason to believe that they can only be deduced from the value premises we have postulated by making a number of most unrealistic assumptions

To conclude this chapter, it may be worth noticing that some of these 'optimum' conditions can be deduced from quite different value premises to those which we have postulated The ones which we postulated were used for various reasons (*a*) because they alone suffice to deduce all the 'optimum' conditions developed above, and (*b*) because all the above conditions are more or less tradi-

tional in economic theory, and therefore we can say that the value postulates we have made are implicit in much economic theory, and finally (*c*) because we think that they would be generally acceptable in any liberal society This is not, of course, to say that the system which has been somewhat precariously based on them would be acceptable. That is very much more doubtful

Let us, then, briefly consider some other set of value premises, as follows

> The relative value of different products is to be determined by some schedule drawn up by the government Welfare is maximized when the value of the national output, thus determined, is greatest.

What 'optimum' conditions can we now develop? It is clear that all the exchange conditions vanish, as well as the 'ideal' income distribution condition, unless we find that income distribution and exchange conditions affect the value of the national output by causing people to vary the intensity of their work If such variations could not be overcome by force, it would be a matter of empirical investigation to find out which method of allocation and distribution was best, from the point of view of maximizing the value of the output, according to the fixed value coefficients If organization was not valued as an end in itself, i.e was not accounted part of the product, the price mechanism might be left in being as requiring least organization. The 'optimum' production condition II (*a*) would remain, and be applied to all factors This would require the direction of labour Men would be required to work until their marginal productivity fell to zero. Whether this would be short- or long-run marginal productivity would depend on the relative scheduled values of products over time. Real wages would depend on the relative valuation given to the various wage-goods, which would, presumably, be such that workers did not starve, but which would otherwise depend on governmental decision The 'optimum' production condition II (*b*) would remain, with the difference that the marginal rate of transformation must now equal the relative scheduled values, but it would still be subject to the difficulty of external economies and diseconomies of production. The savings conditions would likewise vanish The investment condition IV would remain, but with the difference that the government's relative scheduled values for future products over present products

would determine each commodity-rate of interest, and replace the precarious combination of expected price movement plus rate of interest, which determined the expected commodity-rate of interest in the first system discussed

The 'optimum' conditions which remain, II (*a*), II (*b*) modified, and IV modified, rest, however, on a very much more secure basis than do the corresponding conditions in the previous system; because we no longer rely on a behaviour-line analysis, with all the doubt about whether it applies to real individuals, because we no longer have to wonder how the word 'individual' can be interpreted in some of the conditions; because we have postulated that the distribution of real income is irrelevant.

Welfare economics may thus be fairly simple in a collectivist state Its conclusions could be applied with some degree of confidence But, of course, many people will want to say that it is quite ridiculous to maintain that the brief sketch made above has anything to do with welfare economics I would agree But, in saying that, I doubt we would be saying anything more than that we do not find its value premises acceptable. To call such a sketch a sketch of welfare economics might not be a misnomer. But it would definitely be persuasive naming.

CHAPTER IX

THE 'OPTIMUM' CONDITIONS OF PRODUCTION AND EXCHANGE (2)

IN the last chapter it was shown that the 'optimum' conditions rest with varying degrees of plausibility on 'individual preferences'. We also showed, for each 'optimum' condition, what prior conditions require to be satisfied if it is to be a good thing to put it into operation. The circumstances under which each 'optimum' condition would be fulfilled in the real world were also stated. Whether or not it would be a good thing to reproduce these circumstances is a question the answer to which depends partly on the plausibility of the theoretical deductions, but also on wider considerations which must now be discussed

Let us begin with the 'optimum' condition of exchange 1 (*a*), from which it was deduced that all individuals should be faced with the same set of prices, and be free to choose. It is clear that this precludes rationing, which is the most important way in which this condition is upset in the modern world Rationing is introduced when the price of certain necessities and semi-necessities would otherwise rise so much that there would be a considerable redistribution of real income. Thus it is tempting to say that rationing is only necessary because the distribution of real income is not 'ideal' This is, however, only true if the 'ideal' distribution of income is held to be represented by an equal distribution of money—and probably no one in the world who is in a position of responsibility holds that But if some other distribution of money is 'ideal', then a rise in the price of necessities (necessities are, roughly speaking, all goods regularly consumed by the poorest section of the community) must always result in a shift of real income away from those with lower money-incomes. Now rationing would fall under case 6 of Table II, and therefore it would be correct, according to the theory, not to introduce it, but rather to redistribute income by taxation This would, however, upset another 'optimum' condition. Therefore what is required is to redistribute income by non-marginal taxation. Quite apart from the fact that such taxation would upset people's ideas of equity very

much more than rationing, this is not a practical suggestion. Redistribution by capital taxation is a slow and cumbersome process. In the meantime, the rise in the cost of living for the working classes might provoke a wage inflation, which would itself cause a shift in the distribution of real income which might well be regarded as undesirable Here, the chief reason why welfare theory fails us is that it is static, and pays no attention to the time-lags which occur in the real world

Quite apart from the question of inflation, there is wide agreement that rationing is the right policy when important shortages occur This seems to show that real income distribution effects would generally be held to be of considerably greater importance than the fulfilment or non-fulfilment of the theoretical 'optimum', supported as the latter is, in this case, by a wide belief in the intrinsic value of freedom of choice Yet this particular 'optimum' condition is the most securely based of them all, since (*a*) it does not depend on the fulfilment of any of the other 'optima', and (*b*) because we can here deal with a very short period, since we can abstract from production changes, whence the application of the phrase 'economic man' presents least difficulty. There is no reason to suppose that rationing would not sometimes be the best policy in a fully socialized but individualistic economy Finally, where such shortages do not occur, and with reference to things and individuals for which and whom freedom of choice is commonly regarded as good (e g excluding children and lunatics on the one hand, and such things as dangerous drugs on the other), then there is no disagreement about whether this condition ought to be satisfied or not.

We have already seen that the two remaining 'optimum' conditions of exchange (1 (*b*) and 1 (*c*)) are much less securely based. The balancing of work against leisure, and of one job against another, cannot, in any normal system, be very plausibly made the subject of a marginal analysis of the free choices of actual individuals Nor can we simply say that the system ought to be altered to make the reign of individual preferences more secure in this field, because individual workers are far from being independent, and therefore changes in the amount and kind of work done by one worker are liable to have considerable diseconomies of production To put it in another way, variations in the amount and kind of work that Smith does cannot necessarily be made a matter of

indifference to Jones. With regard to these two conditions, it is clear from what was said in the last chapter that 'individual' can only be reasonably interpreted to apply to average individuals, taken over a fairly long period of time. This is not, of course, to say that actual individuals ought to be made to shift their jobs, if so required. That question clearly cannot be considered in the light of economics alone, we can only say that, given our value judgements, it must decrease the economic welfare of a particular individual if we force him to work where he does not want to, or if we give him an all-or-nothing choice as to the amount of work he does. The balancing of the claims of free choice for actual workers against the advantages of increased production is a matter towards the decision of which the static theory of welfare seems to give us little help. The 'optimum' conditions under discussion are formally independent of the 'optimum' production conditions, but it seems clear that, in practice, any attempt to increase the degree of their realization would not necessarily result in an improved state of affairs.

It seems remarkable that economic welfare arguments have not been pressed against such movements as the 'closed shop' when marginal-cost pricing in public utilities, the arguments for which depend, among many other things, on the realization of these conditions, has been suggested. This is not to say that economic welfare arguments can be plausibly used in this connexion. Decisions on such questions, where it might at first sight be thought that the theory of economic welfare would have something to say, are liable to be influenced by important ethical considerations, which are independent of economic welfare, and which dwarf into insignificance the rather shaky deductions which the latter theory offers for our guidance. That this is so does not seem to be merely an accident of the system, or the time. It arises from the fact that (*a*) the phrase 'individual preferences' cannot be very clearly or precisely interpreted, and because (*b*) work gives rise to external economies and diseconomies.

Thus there is no reason to suppose that an absolutist government, which accepted an individualistic 'welfare function', would be right, according to its own lights, if it attempted to increase the freedom of choice of workers; nor is there any reason to suppose that such a government would actually try to do this. There is no clear-cut line of division on this point between utopians and the rest.

We come now to the first production condition II (*a*), which im-

plies that different firms ought to be free to buy material factors of production at the same price, and human factors at price differentials depending on relative individual preferences for the different jobs. As far as the material factors are concerned, to put this condition into operation is a sufficient condition for an increase in welfare if any redistribution of income is not unfavourable Probably discrimination between firms in the matter of supply of raw materials and power is not very common, except as the result of governmental control Nor is it very likely that there would be a significant redistributional effect consequent on putting the condition into operation where it does not already hold It thus appears to be one of the best cases for applying our criterion that we are likely to find The condition is, in normal times, probably the least controversial of all It is widely accepted that discrimination in the supply of factors to firms is a bad thing,[1] and any discriminating monopolistic supplier of a factor would probably get little sympathy if he were harmed as a result of putting the present condition into operation

We have also noticed that this 'optimum' condition is strictly only a sufficient condition for an improvement if there are no external economies and diseconomies The best method of dealing with these external effects is agreed They ought, if possible, to be charged to firms, or, if the external effect is a 'nuisance' which could be easily avoided, controlling legislation may be more appropriate In either case there is little point in discussing how much confidence we would have that, as the result, the gainers could overcompensate the losers, because the answer would depend entirely on the particular case and the magnitude of the external effects, and because this is not a controversial matter As far as the human factors of production are concerned, the condition implies that firms ought to be free to employ what labour they want at the prevailing market price of labour Again, in normal times, this condition is not controversial

But, in abnormal times, as, for instance, when a country is suffering from an adverse balance of foreign trade, a choice of evils may have to be made Both financial and physical controls, designed to correct the adverse balance, may, if they are to be

[1] This wide acceptance is, however, almost certainly based on the belief that such discrimination is unfair, rather than on considerations of (static) welfare theory

effective, imply that one or other of the 'optimum' conditions must be broken. Thus we may, for instance, be faced with a choice between deflation and physical controls as means of shifting factors of production from home to export industries The former method is liable to result in unemployment, and the latter may result in an infringement of several of the 'optimum' conditions, including the present one. Controls on either materials or labour alone will tend to upset the 'optimum' factor proportions. The preservation of 'optimum' proportions may then well be impossible without control of labour. We have already seen the difficulties which arise in trying to reconcile a rapid shift of labour in the short run with the preservation of relative wage-rates determined by individual preferences.

The upshot is that welfare theory does not assist us materially in deciding what is the best way of resolving 'abnormal' difficulties And 'abnormalities' are, perhaps, not so very uncommon. On the other hand, when there is no particular pressing reason for upsetting the 'optimum' factor use condition, then whether it should or should not be fulfilled is not a point at issue

The next 'optimum' condition, II (*b*), requires that output should always be adjusted, given a perfectly elastic supply of factors, until price is everywhere in the same proportion to marginal cost. We can best deal with this condition in conjunction with the final production condition, II (*c*), which requires that human factors (and all other factors which are also consumption goods) should be paid, given that there is no marginal taxation, the value of their marginal products. Together, the two conditions require that output should always be adjusted until, if possible, price is equal to marginal cost

Let us first be clear what 'marginal cost' means in this connexion It has been suggested that 'marginal cost' is vague. There are short-run and long-run marginal costs. In fact, there may be a different marginal cost for every different length of time which we may choose to allow for the marginal adjustment of output to be made. To which marginal cost ought price to be equated? The ambiguity of 'marginal cost' has allowed some writers to suppose that the theory says that price ought to be equated to long-run marginal cost But it might be argued that all costs are marginal in the end, so that marginal cost pricing and average cost pricing are one and the same thing

The above suggestion is, of course, fallacious First, the theory does not claim that price ought always to be equal to marginal cost. It maintains that output ought always, if possible, to be adjusted until price is equal to marginal cost One of the two points of so adjusting output is that the rate of transformation between any two goods ought always to be made, if possible, equal to the individuals' common marginal rate of substitution between the two Thus, take the case of a bridge for which the marginal cost of a crossing is zero, i e a crossing cannot be transformed into anything else, because it uses up no factors of production. Therefore the output of crossings ought to be expanded until the price is zero. But, suppose that the bridge reaches full capacity at some positive price Then, if price was lowered to zero, queues would form to cross the bridge Demand would then be greater than supply, and the first exchange condition would not be satisfied. The 'optimum' pricing policy is always such as to equate supply and demand

Thus output ought, if possible, to be adjusted until marginal cost equals price. Let us now suppose that short- and long-run marginal costs diverge Ought output to be adjusted until short-run marginal cost or long-run marginal cost equals price? The theoretical answer is that output ought, in the short run, to be adjusted until short-run marginal cost equals price, and it ought, in the long run, to be adjusted until long-run marginal cost equals price. Once having reached the long-run position, i.e once the supposedly 'optimum' plant is laid down, then, whatever happens to price, the short-run output with this plant ought theoretically to be adjusted so that short-run marginal cost equals price. The equality of both short-run and long-run marginal cost with price may, of course, be impossible This does not matter. At any given moment, it is theoretically correct that short-run marginal cost should, if possible, be made equal to price. It may happen that such an output policy will prevent the firm earning enough to be able to make, without assistance, the long-run adjustment required of it There is no logical difficulty here, since the firm can be subsidized.

Before we discuss the theoretical validity of this output criterion, there is one more possible source of confusion with which we must deal What is the unit of output with which we are dealing when we speak of marginal cost? Are we, for instance, to take a passenger

train or a passenger's seat on the train as the unit? The answer to this depends entirely on the nature of the 'individuals' with which we are concerned. To see this, we have only to remember that the rate at which one product can be transformed into another is, theoretically, to be made equal to the 'individual's' rate of substitution between the two Thus, in the case of the train, if the 'individual' is to be interpreted as the ordinary single passenger, then we are concerned with the marginal cost of carrying an extra passenger. This may be taken as being approximately equal to zero. In other words, a particular individual railway journey cannot be transformed into anything else. It follows that price should be lowered until either the train is full, or price is zero.

On the other hand, an 'individual' may be differently interpreted. If a school decides to hire a train for an outing, we must treat the school as a collective, and the train should be run only if the school pays the whole cost of running it Normally, of course, it would not be plausible to treat the collection of people who happened to be assembled on a certain train as a collective Nor would it, for instance, be plausible to treat all users of a certain park as a collective The theory requires that no charge, or next to no charge, should be made for the use of most of these objects, parks, trains, &c., which are too big to be consumed by one person

Let us now consider the conditions under which an output policy based on marginal costs would be valid We saw in the last chapter that all the 'optimum' conditions of exchange, and the production conditions II (*a*) and II (*b*), would first require to be satisfied. Quite apart from the difficulties involved in supposing that individuals are perfectly consistent, we have in this chapter seen reason to believe that none of the conditions of exchange (except perhaps I (*a*) in 'normal' times) is likely to be very closely satisfied. This goes for a utopian society, set up with the 'optimum' conditions as its Bible, as much as for a society which knows no economic theory. The same is true, except when times are 'normal', for the production condition II (*a*). In the last chapter we saw that production condition II (*b*) is particularly shaky. We have to presuppose that actual individuals are free to choose the amount and kind of work they do, and that these can be varied at the margin But this condition also requires that there be no taxation on the margin of effort, because, if there is such taxation, then the rate at which the individual is willing to exchange work for leisure

will not be equal to the rate at which such exchange results in greater production. This question of taxation must be examined at greater length.

It is evident that the 'optimum' conditions rule out both direct and indirect taxation If there is direct taxation, then a worker will, if he behaves as an economic man, equate his marginal net earnings to the rate at which he is willing to substitute leisure for work In which case his *net* earnings ought to equal the value of his marginal product If price equals marginal cost, his net earnings will be less than this. But indirect taxation affects a man's net earnings in real terms in just the same way. Each man is assumed to bring his rate of substitution of leisure for work into line with the rate at which supplying more work enables him to consume more of the good he helps to produce. If this good is taxed, then this latter rate must be less than his marginal physical productivity. If it is some other good that is taxed, we have the same effect, because the purchasing power of the good he helps to produce in terms of the taxed good is reduced Therefore the only permissible tax is a poll tax It follows at once that the condition that marginal cost equals price is invalid in a country such as England, where marginal rates of taxation are far from negligible

It may, however, be argued that there is no reason why, in a properly designed society, there should be any marginal taxation This is a very dubious argument. In such a society some 'ideal' distribution of real income must be preserved At the same time, everyone's net earnings must equal the value of their marginal product. But there is no reason to suppose that there would be anything 'ideal' about a distribution in which people received the value of their marginal products The higher earners might still be considered to be too rich If so, some of their real income must be removed by a poll tax. But to preserve the 'ideal', this so-called poll tax would have to vary with income earned In which case it would not, of course, be a poll tax, and would offend against the 'optimum' conditions[1] It follows that the economic Utopia presupposes that it is considered that the 'ideal' distribution of real income is determined by marginal productivities

The above is not the only difficulty It is also exceedingly difficult to imagine a modern society where there would be no taxation, and where everyone was paid the value of their marginal products. Rents, where they could be collected, must cover all government

expenditure, the 'ideal' living standards of all those who do not work, and, perhaps, a budget surplus as well. There is a tendency to think that a social dividend, rather than taxation, would be the order of the day This appears to be optimistic when we remember that many firms would be operated at a loss. Indeed, when we bring in dynamic elements and allow for the possibility of change, it is evident that a society which called itself 'ideal' would have to allow for a considerable degree of flexibility. Flexibility implies surplus capacity, and surplus capacity implies that marginal costs are less than average costs. Perhaps, then, all firms would be operated at a loss, in which case taxation might have to be very high. I think we can reasonably conclude that an ideal society must have taxation But only a poll tax is permissible Is there any reason why poll taxation should not be used? It seems quite obvious that it would be impossible to assess individuals' liability to such a tax in a manner which would be considered reasonable and fair. It would inevitably give rise to such grave injustices that it would be considered intolerable Furthermore, the maintenance of full employment requires a very flexible tax system which can operate with rapidity, and a system of poll taxes would be very inflexible It seems a trifle absurd to consider such a tax, the impracticability of which scarcely needs pointing out We consider it only because some welfare economists have gaily bandied about the idea of 'lump-sum payments' [1] It is abundantly clear that lump-sum confiscations and compensations cannot become a matter of routine policy. They can be used only occasionally, when exceptional changes are made.

We can thus conclude that it is impossible to envisage a society in which all the 'optimum' conditions, presupposed by the idea that price ought to equal marginal cost, are fulfilled If for no other reason, the inevitable presence of marginal taxation would require that price be somewhat lower than marginal cost. Furthermore, the 'optimum' condition II (*b*) would require that the extent to which marginal cost was greater than price would depend on the capital labour ratio. In which case, the 'optimum' condition which

[1] The significance of the payments being 'lump-sum' is that they must be uncorrelated with any economic category, correlation with which would upset the 'optimum' conditions Even capital taxation, unless it is each time believed to be 'once and for all', is ruled out, because it would affect people's behaviour in respect of both saving and working It would, in Professor Pigou's terminology, have 'announcement' effects

lays it down that prices ought to be at least proportional to marginal costs could not be fulfilled These conditions might thus, in practice, be inconsistent Furthermore, the lower prices are made, in the endeavour to attain the 'ideal' output, the greater taxation may have to be.

There seems to be some evidence for the view that, over a wide field of manufacturing industry, marginal costs are fairly constant until absolute full capacity is reached But absolute full capacity can surely only be an 'ideal' on paper. If output falls only a little short of full capacity, average cost may be considerably higher than marginal cost Thus, the fact that price (if equal to average cost) may be considerably greater than marginal cost cannot be taken to be an indication that output is considerably below the so-called 'optimum' This sort of consideration leads us into the theory of monopoly and monopolistic competition, the discussion of which we must defer to a later chapter

We may sum up the present discussion by asking (as we have asked for the other 'optimum' conditions) what is required for it to be sufficient for an improvement in welfare always to adjust output wherever and whenever possible until price is equal to marginal cost Formally the answer is that it can be proved to be sufficient only if all the 'optimum' conditions are put into operation at once, and if the resultant redistribution of income is considered to be not unfavourable, and if all external effects are absent But we have seen that it is manifestly impossible to put all the conditions into operation. Indeed, with regard to all the 'optimum' conditions, except II (*b*), we have shown that there is no very good reason to suppose that a government determined to 'improve economic welfare', according to our criteria, would be justified in trying to see that they were at all closely satisfied It therefore becomes highly unlikely that economists would be justified in informing such a government that output ought always to be adjusted until marginal cost was equal to price. They surely could not have any very great confidence in believing that, as a result, the gainers would be able to overcompensate the losers

How can one begin to estimate the extent of the conceivable gains, even on the impossible assumption that all the other conditions were satisfied? There is clearly no way of measuring such potential gains. All that one could do would be to give the reader some rough idea of the adjustments in output that would result

Presumably the output of some public utilities would be rather greater. The output of those industries where competition was 'purest' would be reduced, notably agriculture and other primary products. There might be certain adjustments within manufacturing industry The size of such adjustments could not be estimated without large-scale research into costs. My guess is that it would be rare for the resultant adjustment to be more than a very small percentage of total output. Against the gains, which the reader may think could conceivably result, must be set (*a*) the fact that some of the presupposed 'optimum' conditions are rather meaningless, since the behaviour-line analysis applies, at best, only very roughly; (*b*) the fact that it would seldom be at all clear that, according to our criteria, they ought to be satisfied, even if they could be

In order to make price everywhere equal to marginal cost we would also need to alter the whole order of society The whole of manufacturing industry would have to be socialized, since pure competition does not exist within this sphere If this has to be done, then it is clear that dynamic arguments, taking into account the possible improvement or deterioration in such things as industrial relations, and managerial ability and zeal, and the effects on inventions and techniques, are vastly more important than the static arguments of economic welfare theory. Also, it is clear that the political and social changes, which would be involved, might have effects on welfare, for good or ill, which would dwarf the comparatively minor adjustments of output into utter insignificance

If the idea of making marginal cost everywhere equal to price is abandoned, the question arises as to whether a more easily achieved part fulfilment of the 'optimum' conditions would not be a good thing. The thesis that it would be was advanced by Professor R F. Kahn in his article 'Some Notes on Ideal Output'.[1] The idea is, essentially, to equalize marginal rates of transformation and substitution by getting prices everywhere in the same proportion to marginal costs—i e fulfil optimum condition II (*b*) and forget II (*c*) The argument is simply that if the ratio of price to marginal cost is greater in one productive unit *A* than in another *B* then a shift of factors of production from *B* to *A* will increase the national income [2] This is because the ratio price : marginal cost is

[1] R F Kahn, 'Some Notes on Ideal Output', *E J*, Mar 1935

[2] It will be shown in Ch XII that an increase in the national income measured

equal to the ratio of the value of the marginal physical product of a factor to its price consequently a shift of a pound's worth of any factor from B to A must increase the value of the product.

This thesis cannot be theoretically valid unless it is assumed that the change will not affect the supply of original productive factors (work and saving). If it does affect it, then there is no guarantee that the national income will be increased. In general one must assume that the supply of productive factors may be changed, since the pattern of the outputs and prices of goods will be changed, and this may affect the supply of, e g. leisure, through the relations of complementarity and substitutability which exist between leisure and each of the goods

This thesis that even if price cannot be made equal to marginal cost it should at least be equiproportional to it, is formally identical to the case for direct versus indirect taxes, which is examined in Appendix IV, to which the reader is invited to turn for further discussion of this point But here it may be noted that the proportionality thesis, as it may be called, is a particular case of the thesis that it is better to have some optimum conditions satisfied rather than none, or more than fewer. There is no theoretical warrant for this (it is rather like saying one must be higher up a hill if one is on a ridge, where there is at least one direction which takes one downhill, than if one is not on a ridge), unless special assumptions are made For instance, one can say that the validity of the exchange conditions does not depend upon the satisfaction of the production conditions. but this is valid only for a fixed set of goods Similarly the proportionality thesis cannot be valid unless there is a fixed supply of factors of production.

Another difficulty inherent in the proportionality thesis is that some goods are both final consumers' goods and intermediate productive services, e.g coal If the price of electricity were greater than its marginal cost, and that of coal equal to its marginal cost, then the rate at which coal was transformed into electricity could not be equal to the rate at which the consumer was willing to substitute one for the other.

at prices prevailing after the change shows that the Scitovsky criterion is satisfied—but not satisfied in a sense which proves that the change causing the increase is a desirable change in our sense The increase in national income here referred to in the text is in terms of prices reigning before the change, but so long as the planned shift in factors is small there is a high probability that such a change would also result in an increase at subsequent prices.

But Professor L. W McKenzie has shown that the proportionality thesis would be invalid even if it were assumed that factor supply would be unaffected, and even if no goods were both final goods and factors of production.[1]

In effect the thesis assumes that all goods are produced in productive units whose inputs consist only of original factors of production If, as is always the case, a firm uses both original factors and intermediate products, then its relative usage of them will be 'distorted', since, if the price of the intermediate product is greater than its marginal cost, then the relative prices of these factors will not equal the rate at which more of the intermediate product could be obtained by devoting more of the original factor to its production. There will be a bias operating against intermediate products, which will be greater the greater the number of different productive units (in which price exceeds marginal cost equiproportionately) through which the intermediate product passes Thus, although by shifting factors from a productive unit *A* in which price · marginal cost is lower to one *B* where the ratio is higher, one ensures that the value of the new goods produced in *B* exceeds the value of those no longer produced in *A*, it does not follow that the value of the *final* goods produced in the economy is thereby increased.

All this is overwhelming against the proportionality thesis, viewed as a general theoretical proposition. But this is not the same as saying that it can have no practical value Most detailed and partial applications of welfare theory will be via examining in particular cases whether a change in output or price policy would be likely to increase the national income. In making such an examination one may sometimes be justified in judging that certain *ad hoc* simplifying assumptions can be safely made, e g. that the supply of original factors would be unchanged Such predictions of an increase in national income must rest on comparisons of prices and (marginal) costs Where, for some pair of goods, the relative marginal costs are greatly out of line with relative prices, there is a prima facie case for investigation. In making the investigation one will be aware of the fact that any change in the outputs of the two goods in question will affect not only their own relative prices and costs, but possibly those of many other goods One will

[1] L. W. McKenzie, 'Ideal Output and the Interdependence of Firms', *E J.*, Dec. 1951.

also be aware of the fact that marginal costs may be partly in respect of goods whose price is already 'distorted': and one must keep one's eyes open for external economies and diseconomies, &c. Even given these elaborate complications, one may nevertheless sometimes be justified in the view that the national income could be increased by a change. Only if one is prepared to accept the thesis that costs have no bearing on what and how much should be produced can one really deny this. But, it should be noted, that even after arrival at this point one still has not got a theoretical warrant for the change [1]

[1] See pp 231–2.

CHAPTER X

INDIVISIBILITIES AND CONSUMERS' SURPLUS

THE 'optimum' conditions of exchange and production which were developed in Chapter VIII, and discussed in Chapter IX, apply only to marginal changes. That is sufficiently obvious The whole analysis was conducted in terms of rates of exchange or transformation; and wherever it makes sense to speak of rates, there, by definition, the marginal analysis is applicable Where, however, the amount of a thing bought or produced can only be varied in jumps, i e. where there are 'indivisibilities', there, again by definition, the marginal analysis cannot apply

Thus, to say that some indivisibility occurs is only another way of saying that a marginal analysis cannot be applied. The problem remains of when it is legitimate to apply the calculus, and when not. It has been seen that, in the physical sciences, the way to answer this question would be to apply the calculus, and test the resultant conclusions. But, in practice, welfare conclusions about society cannot be tested The only procedure left is to make some estimation of how well the defining characteristics of our concepts (e g if a marginal analysis is to be applied, 'goods' must be perfectly divisible) are realized. One's faith, or lack of faith, in the conclusions can be based only on this kind of estimation

In discussing the theory of consumers' behaviour in Chapters II and III, it was presupposed that the objects of economic choice were perfectly divisible A consequence of this assumption is that the individual would remain on the same behaviour line if one unit of a good were withdrawn and the money, which he paid for it, were given back. We can put this in another way by saying that it is assumed that there is no consumer's surplus on the marginal unit of consumption If, in reality, consumption units are expensive, it may not be true that it is thus a matter of indifference to a man whether he consumes the *n*th unit or not Or, again, to put the same point in another way, a consumer normally buys so few of such things as motor-cars, refrigerators, and wireless sets, that it does not really make much sense to speak of the rate at which he

is willing to substitute one for the other The case is even worse when we consider different jobs. One clearly cannot speak of the marginal rate at which a man is willing to exchange being a don for being a dustman.

We have already seen that the fact that jobs are not perfectly divisible is a good reason for not taking those 'optimum' conditions, which depend on this assumption, too seriously. The obvious indivisibility of many consumption goods is an additional reason, especially if one is concerned with the 'optimum' output of manufactured goods of a luxury or semi-luxury kind Few consumers will ever buy more than a very few identical units of such goods. Thus, we cannot plausibly say that an individual brings the rate at which he is willing to exchange a car for a radiogram into line with their relative prices If consumers really could, and did, do this with respect to all goods, it would follow that it would be impossible ever to raise the price of any superior good without every individual reducing his purchases This is manifestly not the case. It could be true that no one man would ever own more than one radiogram, but it certainly would not then be true that a small rise in the price of radiograms would result in none being sold Equally, it is not absolutely certain that one will get rid of an employee by reducing his wages a little.

The above paragraphs may help us to see which kind of changes can reasonably be said to be marginal, and which not Strictly speaking, a change is marginal, for the purposes of welfare theory, only if it does not affect the consumption of any individual by more than a marginal amount. Thus, if we are to be strict, we cannot apply the marginal analysis to any change (however small) in the production of a good of which the individual does not consume many units. Even if 1,000 Bentleys are produced per annum, one extra Bentley cannot necessarily be considered to be a marginal unit, because no man consumes many Bentleys per annum. On the other hand, if 1,000 Bentleys are sold per annum, it is reasonably plausible to suppose that there would be some consumer who would scarcely be willing to pay any more than he in fact did. In which case there would be no loss of consumers' surplus on the withdrawal of the marginal (as we may therefore call it) car. On the other hand, if the minimum possible adjustment was, say, 100 Bentleys, it would be unplausible to suppose that no consumer would lose as a result of such a shift in production. A good test of

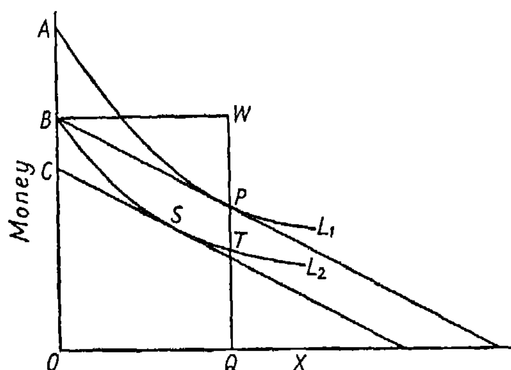
whether an increase in production is marginal or not is to ask whether it would be possible to sell the increased number of units (or would have been possible to sell those units which are no longer produced) for significantly more than they in fact sell, if discrimination between customers were possible. If this would be possible, then the change is not marginal Notice the presence of the word 'significantly'. It is there to indicate that, in the last analysis, whether a change can be considered to be marginal or not is a matter of personal judgement There is no scientific test of when to apply the analysis, and when not A marginal change must, for the purposes of welfare theory, also be marginal with respect to workers as well as to consumers If an insignificantly small increase or reduction in wages would not cause a movement of workers sufficient to result in the required change of production, then that change cannot be considered to be marginal

A particular, but important, case where the marginal analysis cannot be applied, is where the effective unit of production is so large that no single consumer would buy it—e g. new roads, railway lines, parks, or museums In such cases the good may be divisible in that consumption of it can be shared though in such cases the application of behaviour-line analysis is often complicated by important external economies and diseconomies. But the unit of production is manifestly too large for the decision, whether to produce it or not, to be considered 'marginal'. In other words the price which would equate supply and demand for the good, would be such that many people would have been willing to pay far more than they in fact have to

Since, by definition, consumers' surplus does not arise in respect of marginal changes, it was thus necessary to define the scope of marginal changes (that is also the range within which the 'optimum' marginal conditions of production and exchange are valid) We must now define the concept of consumers' surplus more carefully. With Marshall it was the difference between the sum of money actually paid by an individual for a given number of units of some consumption good, and the sum of money represented by the relevant area under his demand curve for that good. This difference was supposed to be a money measure of the excess satisfaction which the consumer derived from that product, so long as we do not take this idea too seriously, there is no doubt that it has a certain plausibility. As it stood with Marshall, the doctrine pre-

supposed, in fact, a cardinal measure of 'utility'. Professor Hicks has, however, rehabilitated the theory in terms of an ordinal utility system,[1] and consumers' surplus has come to be regarded not as a money measure of excess satisfaction (though if one pleases one can still so regard it) but rather as the sum of money which would require to be paid to a consumer, or which he would be required to pay after some change was made, if it was desired to raise or reduce him to the same level of satisfaction (to the same behaviour line) as before the change.

FIG X



The changes to be considered may be (finite) changes of the quantity of goods or of the price. Let us consider quantity changes first.

In Fig. X money is measured along the vertical axis, and amounts of some good *X* along the horizontal axis. In the initial situation, let us suppose that the consumer has an income of *OB*, and that the slope of *BP* represents the price at which he is free to

[1] J. R Hicks, 'The Rehabilitation of Consumers' Surplus', *R.E S*, vol viii, 1940–1. See also among others A M Henderson, 'Consumers' Surplus and the Compensating Variation', ibid , J R Hicks, 'Consumers' Surplus and Index Numbers', ibid , vol ix, no 2, R L Bishop, 'Consumers' Surplus and Cardinal Utility', *Q J E*, May 1943, J. R Hicks, 'The Four Consumers' Surpluses', *R E S*, vol xi, 1943, F Knight, 'Realism and Relevance in the Theory of Demand', *J P E*, vol lii, 1944, J R Hicks, 'The Generalized Theory of Consumers' Surplus', *R E S*, vol xiii, 1945–6, 'L'Économie de bien-être et la théorie des surplus du consommateur', and 'Quelques applications de la théorie des surplus du consommateur', *Bulletin de l'Institut de science économique appliquée*, numéro 2, Dec 1946, E J Mishan, 'Realism and Relevance in Consumers' Surplus', *R E S*, vol xv, no. 37, 1947–8

buy X. P therefore represents his equilibrium position where he reaches the behaviour line L_1

How much money would it be necessary to pay the consumer in order to compensate him for the loss of the opportunity to buy X, i.e. how much is needed to compensate him if X is withdrawn from the market? He must still be able to reach the curve L_1. The amount is therefore AB. The natural name for this sum of money is the 'quantity-compensating variation', i.e it is the sum of money required to compensate the consumer for the withdrawal of X from the market.[1]

Let us now ask what sum of money the consumer could relinquish, as a result of the introduction of X, without making himself worse off Let our consumer's initial position be B, on the curve L_2, i e he has the same income, but there is no X X could now be introduced to the market at the price BP, and, at the same time, the consumer's income be reduced by BC His equilibrium position would then be S (CS being parallel to BP), at which point he would be on the same curve as before (L_2). This sum of money we propose to call the quantity-equilibrating variation[2] (in income)

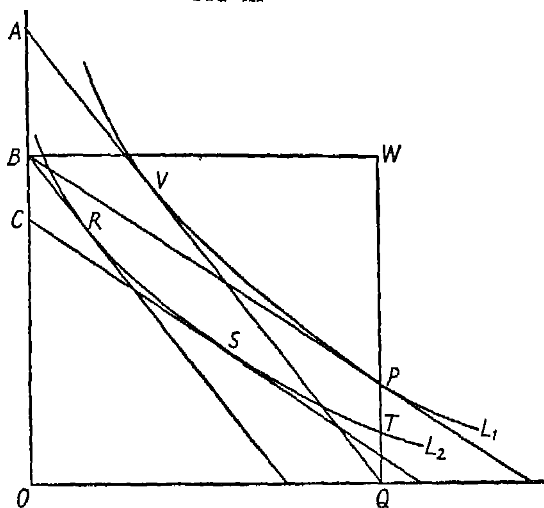
What relation do these two sums of money, AB and BC, have to the sum of money which Marshall defined as consumers' surplus? The area under the demand curve corresponds, if there is no change in the marginal utility of money, to the sum of money which the consumer would give up in order to buy the quantity he in fact buys, rather than go without it altogether. This sum is represented by the length WT in Fig X. Since he actually pays WP, consumers' surplus is PT. But, if the consumer was free to buy as much or as little of X as he pleased, he would not, in fact, continue to buy OQ if he was mulcted of PT. By reducing his purchases he would reach a higher curve Thus he can be mulcted of BC, which is greater than PT, without suffering any loss If, however, the behaviour lines are parallel (i e have parallel tangents) the sums represented by AB, BC, and PT are all equal The assumption of a behaviour-line system having this property over the relevant range corresponds to Marshall's assumption of a

[1] This sum of money, AB, was, however, named the equilibrating variation by Professor Hicks The name compensating variation was reserved for another use

[2] This is what Professor Hicks named the quantity-compensating variation. But it is the sum of money which a consumer is able to give up without becoming worse off—and it seems misleading to call this a compensating variation

constant marginal utility of money. And it is only on this assumption that PT is equal to the usual demand-curve definition of consumers' surplus. We thus have the result that the quantity-compensating and equilibrating variations are equal to the area under the demand curve, if the marginal utility of money is constant, or if (in Hicksian terminology) there is no income effect.

FIG XI



We may now turn to price changes. In Fig XI we again give our consumer an income of OB. P is then the initial equilibrium position, with price represented by the slope of BP Suppose the price is raised to BR The consumer then settles at R, and is on the curve L_2 instead of on L_1 as before If we now raise his income by AB, he will settle at V, which is again on L_1 Therefore AB is the increase in income which just compensates him for the increase in the price of X We therefore (again reversing the Hicksian terminology) call this the price-compensating income variation.

If, however, BR had been the initial price line, the consumer would have been in the position R A fall in price to BP would enable him to reach the curve L_1 If, however, his income is reduced by BC, he can only reach the position S on L_2. Therefore we call BC the price-equilibrating income variation

Again, PT (assuming a constant marginal utility of money)

measures the extra amount which the consumer would be willing to pay in order to buy *OQ* of *X*, at the old price, rather than see the price raised to *BR* As before, if the behaviour lines have parallel tangents within the relevant area of the map, the sum of money *PT* is equal both to *AB* and *BC* In other words, if we neglect income effects, the compensating and equilibrating variations in income, whether in respect of price or quantity changes, are equal to the relevant area under the individual's demand curve. And the relevant area under the market demand curve, on the usual assumptions of 'perfect divisibility', 'economic men', and no 'income effects', shows the amount of compensation which individuals could pay, or would have to be paid, if they are neither to gain nor lose as a result of some change. It is, however, important to remember that the demand curve which is relevant is a Marshallian demand curve, it being assumed that all other prices are constant, and do not alter as a result of the change under consideration [1]

We have said that the above theory is designed to provide a criterion for whether non-marginal adjustments of production ought to be made or not Indeed, the theory tries to answer the same old question 'Could those who gained by this change conceivably overcompensate the losers?', where the change referred to is a non-marginal jump Whenever it cannot plausibly be assumed that all consumers of those goods which constitute a minimum addition to output (and similarly for a reduction) are marginal consumers, then it becomes necessary to invoke consumers' surplus in order to be able to find out whether overcompensation would be conceivable or not. Owing to technical indivisibilities, it is very likely that most changes in output which are the result of changes in plant, rather than changes in raw materials and labour, would theoretically require a consumers'-surplus analysis, thus, if a theoretical answer is to be given to the question whether some new investment (which will certainly always result in a non-marginal change if output with the new plant is extended until $MC = P$) should be made, then the answer can only be given in terms of consumers' surplus, unless we know the behaviour maps of all consumers—in which case we could, in theory, calculate whether the total of the equilibrating variations in income for each individual exceeded the total of the compensat-

[1] But there is some doubt about whether this really was Marshall's assumption. See R F G Alford, 'Marshall's Demand Curve', *Economica*, Feb. 1956

ing variations, i e. whether overcompensation would be conceivable

One of the more important of these non-marginal changes would be the introduction of a new good,[1] or the total withdrawal of some old good from production. We should also note that such changes may give rise to a gain or a loss in producers' surplus in the form of factor rents. There would, for instance, be a gain in producers' surplus if factors were withdrawn from uses in which their supply was perfectly elastic, in order to increase the output of some good in the production of which factors were not in perfectly elastic supply. This particular complication we shall in future ignore, it being assumed that costs are exclusive of workers' rents.

The traditional consumers'-surplus criterion is to the effect that a change should be made if the sum of money represented by the area under the relevant section of the demand curve is greater than the change in total cost, or, to put the same thing in another way, if a perfectly discriminating monopolist could cover costs. The theoretical justification for this criterion is clear. The consumers could pay exactly this sum of money, and be neither better

[1] Formally, a new good cannot be introduced into an old behaviour-line map We can only guess whether the individual will be on a higher curve of his new map than he would be on the same map if he continued to have the present collection The two situations are not strictly comparable The best we can do is to imagine that the consumer knew all about the new good all the time, and that it had a definite place on his scale of likes and dislikes, and that he was simply prevented from buying it, because it had, let us say, an infinite price This is, of course, unsatisfactory The said good cannot, in fact, have been known to him, and its introduction might very well shift his rates of substitution between other goods Some things make us develop a liking for or a dislike of other things Much the same kind of difficulty occurs if we consider large price changes, which bring goods within the reach of those who could not afford them before Many people know that caviar exists, but few know what it is like to eat it

The index-number criterion for an increase in economic welfare remains formally valid We can say, after the new good is introduced, that the consumer could, or could not, have bought his former collection of goods, and we know that in the former situation he certainly could not have bought the present collection, if it contains a new good But the index-number criterion now fails us for a decrease in welfare We can never say that in the earlier situation he could have bought the goods of the later situation Thus, if we take our criteria too seriously, 'on a higher curve' becomes meaningless, while the index-number criterion can never show us that the introduction of a new good is wrong In the text we ignore these difficulties, for which procedure the only defence can be that one has to swallow so many camels anyway that an additional one may be considered to be marginal

off nor worse off—if they are 'economic men' and if there are no income effects. Also, since total costs represent the total sum of money paid to the productive factors, none of whom, it is assumed, earn any rents, then they also are neither better nor worse off as a result of the change—if they are all 'economic men', &c Thus, given sufficient assumptions, we have the result that the gainers could overcompensate the losers if the sum of money represented by the area under the relevant section of the demand curve is greater than total costs. For the sake of brevity we will, for the rest of this chapter, speak of a change as 'correct' if the gainers could conceivably overcompensate the losers. There is perhaps, at this stage, no need to warn readers that 'correct' is only to be understood in this formal sense.

We may ask how this simple consumers'-surplus criterion compared with the profitability criterion It is clear that the two are the same only if the change is marginal. Thus the 'correctness' of pure competition is only proved, given that the addition of a firm to a purely competitive industry in a purely competitive system results only in a marginal addition to output This is obviously unrealistic It is also clear that 'pure competition' is incompatible with the introduction of any new good. The *formal* validity of the profit criterion can thus only be demonstrated given the most unrealistic assumptions

After the above digression let us turn back to the simple consumers'-surplus criterion One of its chief demerits is that it is the result of a partial analysis only. It is assumed that, as a result of the change, there will be no significant change of price elsewhere. The demand curve is drawn up on this assumption. This is sometimes forgotten, and it is made to appear that the criterion has a wider validity than is really plausible. Under what conditions can it reasonably be assumed that prices elsewhere would not change? One possibility is to assume that the analysis is only intended to be long-run, and to assume that constancy of long-run costs is the rule This is not very plausible, and the danger of introducing long-run considerations has already been pointed out. An alternative is to assume that the product under consideration is independent of all other goods, in the sense that an increase in its output would not shift the demand or supply curve, and therefore the price, of any other good by more than an insignificant amount. The increased supply of factors, which would permit the projected

increase of production, would be drawn only from the margins of production elsewhere.

But, even when the good is independent in the above sense, it still requires to be assumed that price is equal to marginal cost elsewhere (either because pure competition prevails, which is impossible, or because a collectivist economy works in terms of the Lernerian rule, which is also impossible). If price is greater than marginal cost, then a small decrease in output elsewhere would result in a small decrease of profits, or producers' surplus, which would not be offset by any gain to consumers This smallness would not be of the second order, and might therefore be significant The consumers' surplus[1] resulting from the change must then be greater than the loss of producers' surplus (in the above sense) in other lines of production. The simple consumers'-surplus criterion therefore fails—even given independence—so soon as we remove the assumption that price is everywhere equal to marginal cost Equally, the profit criterion is invalidated by imperfect competition For instance, the profit which may accrue to any firm which sets up when price is generally greater than marginal cost, takes no account of the decrease in producers' surplus which it causes elsewhere. On the other hand, if a firm makes a profit without discrimination, there is almost certainly some gain in consumers' surplus, which also does not accrue to it, this may offset the loss of producers' surplus elsewhere Thus, in an imperfectly competitive world, the profit criterion might well be more 'correct' than the simple consumers'-surplus criterion, it leaves out two factors of opposite sign, which may be better than simply leaving out one. But, of course, our present assumptions are very unreal It should also be noted that we are certainly not considering the case of a new entrant to a monopolistic industry Obviously, in that case, we could not reasonably assume independence

Let us now reverse our assumptions, and suppose that price is everywhere equal to marginal cost, but the good with which we are concerned is not independent For simplicity, we will assume that there is one close substitute, but that all other goods are independent of this pair of substitutes.[2] The introduction of the new

[1] For simplicity, 'consumers' surplus on *A*' will in future be taken to mean 'Area under demand curve less total costs' (rather than 'less amount paid')

[2] We cannot literally take a two-good or three-good case Consumers' surplus would then become quite useless See A M. Henderson, 'The Pricing of Public Utility Undertakings', *Manchester School*, Sept 1947, p 247, n 1

good *A* will then shift the demand curve for the old good *B* to the left, and the output of *B* will fall. Let us also assume that marginal cost is constant for *B*, so that the price of *B* does not change The area under the demand curve for *A* is then still relevant, because other prices are all constant. Consumers' surplus on *B* is, of course, reduced, but that is irrelevant to the problem. It would be wrong to suppose that we should take account of this reduction That is not difficult to see Some consumers of *B* will not buy any of the new good *A*, but their consumers' surplus may be reduced by the advent of *A* Yet they clearly cannot be made worse off by this advent, since their consumption is entirely unaffected. On the other hand, those who do begin to consume *A* gain, whether or not they consumed *B* before. Their gain is 'correctly' measured by the consumers' surplus on *A*. Since marginal cost is assumed constant for *B*, there will be no loss of producers' surplus on *B* But there may be on the other independent goods, depending on whether or not price is equal to marginal cost Therefore we have the same criterion as for when the new good was independent, but price was not equal to marginal cost, to wit, the new good should be introduced if the consumers' surplus on it is greater than the loss of producers' surplus elsewhere. Once again, there is no reason to suppose that the profit criterion is less 'correct' than the simple consumers'-surplus criterion, which ignores the loss of producers' surplus elsewhere If by the profit criterion we mean 'would an "ideal" output be profitable?', it is possible, but by no means certain, that this criterion would underestimate the 'advantages'[1] of introducing a new good Wherever there is a large indivisibility, a loss would be made on the 'optimum' output. So long as consumers' surplus on *A* is greater than the loss of producers' surplus elsewhere, then some loss is theoretically tolerable If by 'profitable' we mean 'a simple monopolist could cover costs', then, of course, it is less likely that profitability will underestimate the 'advantage'. Equally, it is possible that this latter criterion would overestimate the 'advantage', e.g. this is possible for the case of entry into a monopolistically competitive industry Thus we have found that even if marginal costs are constant for any substitute one can be sure that the simple consumers'-surplus criterion is correct only if price is everywhere equal to marginal cost, and only in these

[1] By 'advantage' I here mean 'probability that the gainers could overcompensate the losers

circumstances can one say that the profit criterion underestimates the advantages of introducing the new good. Otherwise one must allow for a loss of producers' surplus on the old goods.

The criterion—consumers' surplus less loss of producers' surplus elsewhere—ceases to have any meaning in terms of areas under Marshallian demand curves, when we remove the assumption of constant marginal cost for *B* for the assumptions under which such a curve is drawn up are rendered invalid

Professor Hicks has suggested[1] a means by which such a case could be reduced to terms of areas under demand curves and marginal-cost curves. He suggests that these curves should be drawn up step by step, assuming that at each step prices elsewhere are allowed to adjust themselves to each small increase in the output of the new good. For each small step, changes in output elsewhere would always be small, and also marginal, so long as price was equal to marginal cost, and therefore there would be no loss or gain of consumers' plus producers' surplus for at each step price would alter infinitesimally, which would result in a finite gain or loss of producers' surplus at the expense of consumers' surplus, but the change in the sum of the two would be infinitesimal This may formally solve the problem raised by the interdependence of prices, although it still relies on the assumption that price is everywhere equal to marginal cost.

However, the above ingenious construction is open to criticism. First, if price is everywhere equal to marginal cost, we must be considering either a 'purely competitive' system or a 'socialist blueprint' system. Let us take the first alternative. In a purely competitive system no indivisibilities occur, and therefore the step-by-step adjustment described by Professor Hicks really could (indeed would) occur. Therefore it appears that what Professor Hicks has done is to demonstrate the theoretical 'ideality' of purely competitive investment adjustments in terms of areas under demand curves—something which could not be done by means of a normal partial analysis, unless interdependence of prices was simply assumed away. But, of course, such a demonstration is not really required Where no indivisibilities occur, and prices are treated as parameters, then the ordinary marginal analysis of Chapter VIII

[1] J R Hicks, 'Quelques applications de la théorie des surplus du consommateur', *Bulletin de l'Institut de science économique appliquée*, Dec. 1946, p 24

suffices to prove the point.[1] Let us, then, alternatively suppose that we are dealing, not with pure competition, but with a 'socialist blue-print' model in which large indivisibilities occur, but in which price is nevertheless kept equal to marginal cost, and that we are considering an indivisible change (since for no other change is any appeal to consumers'-surplus theory necessary). How, then, can the Hicksian demand curve be drawn? Its points show the prices at which various absurd 'non-optimum' outputs could be sold, given that prices elsewhere are those which would occur if these outputs were actually produced If one guessed the area under such a demand curve, it is evident that no practical test could prove one wrong, nor yet does this construction appear to be of any assistance in aiding one to make an intelligent guess as to whether the gainers could compensate the losers Finally, of course, we still have not accounted for the loss of producers' surplus, which would occur if price was not everywhere equal to marginal cost

The above, rather intricate, discussion, which is not complete, but which I believe to have been already carried beyond the point of zero marginal value, now requires to be summed up First, the simple consumers'-surplus criterion is valid only if the good is independent (or any substitutes are produced at constant marginal cost), and if price is everywhere equal to marginal cost This implies that it would, at best, be valid only in an economy in which all the 'optimum' conditions of production and exchange were satisfied. Secondly, in such an economy, we could deal with goods which were not independent and whose substitutes were not produced at constant marginal cost, only by means of a Hicksian demand curve—which, as we have seen, is open at least to the same objection Thus, unless price is equal to marginal cost everywhere, consumers'-surplus theory is useless, since there would result a multitude of small losses elsewhere, which could not possibly be estimated The only exception might be if the increase in output were entirely at the expense of a strong substitute with constant

[1] In pure competition theory, we admittedly postulate one indivisible factor—the entrepreneur—in order to ensure that the long-run average cost of a firm always rises at some point But, although the entrepreneur is indivisible in relation to the firm, entrepreneurship is regarded as perfectly divisible in relation to the industry This dual nature of entrepreneurship is necessary because pure competition theory seeks to demonstrate the ideal output in relation both to firms, which are infinitesimal parts of an industry, and to industries

marginal costs when, if price were greater than marginal cost, the loss of producers' surplus elsewhere might be estimated

We do not propose to attempt to deal with cases of complementarity, nor with the elimination of a certain good, except to say that the latter appears to present worse problems than the introduction of a new good Confining ourselves, then, to the cases of either the introduction of a new good or an indivisible expansion in the production of an old one, we may say that there appears to be a prima facie argument for the validity of some form of the consumers'-surplus criterion only in the following cases

(*a*) when the good is independent, and price is everywhere equal to marginal cost,

(*b*) when there are one or two good substitutes with constant marginal costs, in which case losses of producers' surplus elsewhere might be estimated

The case is, however, only a prima facie one. There is the obvious fact that areas under demand curves cannot be measured Within very wide limits, it would be anyone's guess as to whether the consumers'-surplus criterion would be satisfied or not. It will, of course, be objected at this point that guesswork is, in any case, impossible to avoid. Before the event, profitability is only guesswork. Surely, it will be said, if consumers' surplus provides a correct criterion (which, of course, it does not, except in very special cases) it is better to guess at it, rather than at profitability Let us, at least, guess at something which gives the right answer if we guess right This defence[1] is plausible, but beside the point. Profitability is not, of course, 'ideal' (except, again, in very special cases), but, at least, one knows after the event whether one guessed right or not The great trouble with any consumers'-surplus criterion is that one does not know, even after the event, whether the criterion was satisfied In fact, the plain truth is that it does not yield us a criterion at all—or if it can be said to yield a criterion, then it is one which is open to anyone's interpretation within very wide limits

To the above objections we may add that we have in this chapter been supposing that individuals are all 'economic', and never die; thus the great difficulties concerned with the application of the whole welfare system to the real world must be added to the

[1] Cf A P Lerner, *Economics of Control*, p 198

particular difficulties associated with consumers' surplus. Even then, we have only been using the theory to estimate whether the 'gainers' could overcompensate the 'losers', ignoring the factor losses and rents (i e assuming that amounts and kinds of work are perfectly divisible), external economies and diseconomies, and the distribution of real income.

Our conclusion is that consumers' surplus is a totally useless theoretical toy In this, we have to disagree with Professor Hicks's conclusion

But enough has been said to show that consumers' surplus is not a mere economic plaything, a *curiosum*. It is the foundation of an important branch of Economics, a branch cultivated with superb success by Marshall, Edgeworth and Pigou, shockingly neglected in the last twenty years, but urgently needing reconstruction on a broader basis Beyond all doubt it is still capable of much further development, if economists are to play their part in shaping the canons of economic policy fit for a new age, they will have to build on the foundations of consumers' surplus.[1]

Professor Hicks has himself cultivated this branch of economics with superb success But consumers' surplus is, nevertheless, a toy, in the sense that it cannot provide us with any practical objective criterion We do not deny that, in the few theoretical cases in which we can contrast, say, gains in consumers' surplus on *A* (imagined as the area under the demand curve less the area of total cost) with losses of producers' surplus (imagined as profits) in another firm producing *B*—then the concept helps one towards an imaginative understanding of the nature of the problem. It is, in fact, to a limited extent, useful as a heuristic device—so long as its limitations, as such, are understood It is also, admittedly, a useful phrase for referring to the fact that a person may be willing to pay more for something than he has to, and also for pointing out the fact that the amount someone pays for something cannot be taken as a measure of the satisfaction it gives him, and that the price of a good cannot be taken as a measure of its importance. But beyond that we cannot go

Whereas Professor Hicks has 'rehabilitated' consumers' surplus, Professor Samuelson has gone to some trouble to prove it 'superfluous' He argues its superfluity as follows

Should discriminating prices be allowed if a uniform price will not

[1] J R Hicks, 'Rehabilitation of Consumers' Surplus', *R E S* (1940)

keep an activity in business? Should the number of firms producing differentiated products be reduced, and in what way? Should a particular small industry be expanded or contracted by means of tax or subsidy? etc. etc Aside from their extraneous interpersonal aspects, all of these questions can more conveniently (and more honestly!) be answered in terms of the consumers' ordinal preference field [1]

This is a rather surprising passage It implies not only that all individuals are 'economic', but also that we have a copy of everyone's 'preference field' filed away One must presume that Professor Samuelson is concerned only with whether to reduce the number of imaginary firms producing imaginary differentiated products in an imaginary society. Then the answer is indeed easy, to wit, 'Yes, if the imaginary gainers are imagined to overcompensate the imaginary losers'. We can readily agree that consumers' surplus is surplus in formal logic, but the point of the theory surely was to establish a practical criterion. At any rate, we have chosen to meet its claims at that level, and have argued that it fails completely. But that is a different matter.

Later Professor Samuelson argues somewhat differently·

. there arises the problem as to whether or not a commodity should be produced at all If it is produced, the marginal costs conditions should be realized, but there may be a better maximum where none is produced Here the extreme position is of the corner type, and the conventional equalities must be replaced by inequalities This involves decision-making at a distance, we cannot feel our way to the optimum, step by step, but must boldly experiment with diverse combinations. Where such 'all or none' phenomena are concerned, things often get worse before they get better, and so decisions *im kleinen* will not suffice . In these cases involving finite decisions we must ask consumers (or Robinson Crusoe) whether a given abundance of fewer commodities is preferred to an alternative scarcity of a greater range of commodities.[2]

In a footnote to the above passage, Professor Samuelson adds.

In certain special cases consumers' surplus may be employed to describe finite inequalities But these cases are rare, and, in any case, we are better off if we use direct methods.

Our analysis is in conformity with this footnote. There are few theoretical cases in which a consumers'-surplus criterion is valid. But the remark that we are better off if we use direct methods is

[1] *Foundations of Economic Analysis*, p 197
[2] Op. cit., p 241

mystifying. What direct methods are there? We can hardly hold a plebiscite to answer the question whether a certain firm should be closed The above quotation brilliantly states the problem of indivisibilities But sometimes it is a little difficult to decide whether Professor Samuelson is discussing the real world, or whether he is indulging himself in what he regards as a vice—translating mathematics into metaphor For instance, when he says 'We cannot feel our way to the optimum, step by step, but must boldly experiment with diverse combinations', is he saying that the infinitesimal calculus cannot be applied to finite changes?—or is he suggesting that a proper procedure would be, for instance, boldly to close down, say, one quarter of all shops, and then see if the country had become happier—and if it had not, to put them back again? Many economic changes are irreversible except at great cost Why, then, should we proceed boldly rather than cautiously? When he says we must 'ask consumers', does he really mean we should get consumers to vote on every indivisible move—or is he only saying that the formal answer can, in the theoretical calculus, be arrived at only by reference to 'indifference maps'? It seems probable that Professor Samuelson is translating mathematics into metaphor rather than trying to help towards any practical solution

In contrast to any so-called consumers'-surplus criterion, profitability really is a criterion If the aim is profits, and an enterprise is started with that in view, then we can, at least, tell whether its objective was achieved Profitability is easy to test, and it is possible to gain experience in profit estimation There remains the fact that the objective is not 'ideal', and also the fact that considerable monopoly power may have to be wielded in order to obtain the profit This is not, in itself, an objection, because one can also estimate, and gain experience in estimating, the profit or loss that would accrue as a result of making the change and adopting a certain pricing policy In extreme cases, as where the pricing policy is to charge nothing, then, of course, any such objective criterion ceases to be possible We do not in this chapter wish to go into more practical matters, but merely to point out that if profitability (with or without certain conditions imposed) is abandoned, as a criterion for making finite changes, then there is no definite, generally applicable, rule which can replace it.

We should note that any criterion for making a finite change is formally independent of the so-called 'optimum' usage of the

plant, the erection of which, say, constitutes the finite change It is not, however, entirely independent in practice Let us suppose that it has been decided that a change should be made if an intelligent business man estimated that profits could be made, given that he could use any output and price policy he chose If we then make such a change, but impose a certain pricing policy, such as making the good free, we lose the test of whether the business man was right or not The profits become hypothetical, and once more it is anyone's guess

We shall, in the next chapter, deal further with the practical problems which have been raised above Before leaving the subject of profitability, it may be worth while seeing whether there is much that can be (roughly) said in favour of, and against, profits as a criterion, at a theoretical level. An investment will be said to pass the test of profitability if a good business man could make profits without price discrimination, or with only a mild degree of price discrimination We will again take the case of introducing a new good, and will first suppose that the good has no close substitutes, also, let us assume that it is the general rule that price is greater than marginal cost We then have the case that the business man cannot tap some consumers' surplus, which is a 'gain', but also he ignores the 'loss' of producers' surplus elsewhere Since these are factors which offset each other, it obviously cannot be proved that the business man's decision would be 'incorrect'. Equally obviously it cannot be proved 'correct' As a second case, let us take the introduction of a new firm into a monopolistically, or oligopolistically, competitive industry Price is everywhere (by definition) greater than marginal cost. In order to be able to talk in terms of consumers' surplus, we assume that there is a conventional price (or that there are constant marginal costs and a normal gross profit margin) We then again have the case that the business man fails to be able to tap some consumers' surplus, but also ignores the losses of producers' surplus caused elsewhere Again, we cannot possibly say whether the introduction of the new firm is 'correct' or 'incorrect'. Indeed, only in the totally unrealistic and impossible case of the introduction of an independent good into a world where price is everywhere equal to marginal cost can it be proved that the profit criterion is 'incorrect'. Equally, it can, of course, never be proved to be 'correct'

I think enough has now been said to show that there is no

general theoretical argument, which can be applied to the real world, either in favour of or against the criterion suggested above. Moreover, the same would be true of a host of alternative criteria Our whole system is not only too unrealistic, but also involves us in the estimation of so many magnitudes which cannot be objectively measured, that it is quite senseless to suppose that it enables us to pick and choose, in any rational manner, between alternative criteria—unless one such criterion appears to be, at the theoretical level, fantastically wrong. The conclusion is clear. The best criterion for investment decisions must, within wide limits, be determined at dynamic and administrative levels—and not at the level of static welfare theory.

CHAPTER XI

OUTPUT AND PRICE POLICY IN PUBLIC ENTERPRISE

THIS chapter is an essay in applied welfare economics. We propose to review and discuss some of the contributions to the marginal-cost controversy. The suggestion of marginal-cost pricing in public utilities in a mixed economy appears to have been first made by Professor Hotelling in his article 'The General Welfare in relation to problems of Taxation and of Railway and Utility Rates'.[1] Professor Lerner, in his *Economics of Control*, also considers a mixed economy, but assumes that pure, or nearly pure, competition prevails in the private sector. Apparently inspired by these contributions, there was, in the post war years, an extensive discussion of the problem.[2]

It was not always quite clear whether the contributors were trying to decide on the best price and output policy for public enterprises in England (or in England in normal times, given a mixed economy), or for socialized firms in a fully collectivist economy We shall assume that the problem relates to a relatively small number of public enterprises in a predominantly private enterprise economy, and in particular to the British economy, under present conditions of taxation.

Two obvious facts spring to mind at once First, price is not equal to marginal cost elsewhere, and, second, there is heavy marginal taxation We have already seen that, in such circumstances, pure theory offers no guidance.[3] The supposedly optimal character of marginal-cost pricing depends upon all the 'optimum' conditions being satisfied everywhere. There is a tendency to

[1] *Econometrica*, July 1938 The practice of marginal-cost pricing in a socialist economy was advocated earlier, chiefly by A P Lerner. Cf 'Status and Dynamics in Socialist Economics', *E J.*, June 1937

[2] The following is a select list of the contributions (There is no need to name titles, since all the articles mentioned below are on the same topic) J E Meade and J. M Fleming, *E J*, Dec 1944, T. Wilson, *E J*, Dec 1945, R H Coase, *Economica*, Aug 1946, W A Lewis, *Economica*, Nov 1946, H Norris, *Economica*, Feb 1947, A M Henderson, *Manchester School*, Sept 1947, and *R E S*, vol xvi (1), no 39, 1948–9 The latter two articles will be later referred to as Henderson (*M S*) and Henderson (*R E S*)

[3] See pp 162 ff

suggest that the correct policy, when price can be assumed to be greater than marginal cost elsewhere, would be to make the price. marginal-cost ratio equal to the average prevailing elsewhere. But there is no theoretical warrant for this, even if one could safely assume that the supply of labour would not vary with any change in the price and output policy of the nationalized industries.[1] It is true, given this assumption, that if factors were moved out of production units with lower price . marginal-cost ratios and into production units with higher ones then the value of the extra goods would exceed those foregone But this does not necessarily mean that the national income would be increased, except on the unreal assumption that all firms employ only original factors of production and produce only final goods [2] But there would be no guarantee even that factors would on balance move where the price marginal-cost ratio was higher as a result of moving the ratio in the nationalized industries from unity towards the average prevailing in the economy. This is because the directions of the factor flows would be governed by the substitutabilities of the various goods. Only if a certain price . marginal-cost ratio were the lowest in the economy does it follow that raising it a little would have this effect. Equally, pure theory does not suggest that it would *not* be a good thing to make the ratio equal to the average. All this is, in any case, rather academic, since no one knows what the average ratio in the economy is.

Almost all the contributors to the controversy failed to notice that the theory did *not*, in general, conclude that price ought to equal marginal cost Even such opponents of marginal-cost pricing as Professor Lewis and Mr. Coase seem to have assumed that the output, which would be the effect of marginal-cost pricing, would be, in some sense, ideal The exception was A M Henderson,[3] who argued that price should (in theory) be greater than marginal cost, except in the case when marginal cost is zero This special case of zero marginal cost will be dealt with later.

So much for orthodox theory. We have argued earlier that no welfare conclusion can be reached unless it is at least given that no unfavourable redistribution of income results Professor Hotelling[4] and Mr Coase[5] appear to have been the only contributors who seriously considered real income distribution Professor Hotelling

[1] See p 163. [2] See p 164 [3] *M S.*, p. 242
[4] Loc. cit , p 259. [5] Loc cit , pp. 176–7

evidently believed that a policy of marginal-cost pricing, combined with covering overheads by general taxation, would not have a significant effect on distribution Thus he argued that a great variety of public works would be undertaken and 'a rough randomness in distribution would be ample to ensure such a distribution of benefits that most persons in every part of the country would be better off by reason of the programme as a whole' [1] This argument is a (prior) application of what we have called the Hicksian justification for ignoring income distribution Mr Coase disagreed with the view that the resultant distribution ought to be neglected It is certainly obvious that some people would pay more taxation, and get little or no benefit Taking, however, a broad view, one could scarcely say that there would be what one might call an exciting change in distribution. But we must remember that the distributional effects must not merely be small, they must also be small in relation to the extent to which the gainers could overcompensate the losers It is much more difficult to say that the distributional effects would be relatively small in this sense.

Mr Coase implied that any redistributional effects will be bad, because he presupposed an 'ideal' distribution of income We have argued above that this presupposition is meaningless and dangerous The redistributional effects, if not negligible, will be regarded as either favourable or unfavourable, and can therefore be used as an argument for or against marginal-cost pricing Mr. Coase also argued, against Professor Hotelling, that compensation could not be paid. Those who gain most would be those who consumed most public services, as Mr. Coase correctly argued, ordinary taxation procedures could not be used to redistribute income from consumers of goods produced under conditions of decreasing average costs to all other consumers.[2] He argued in favour of multi-part tariffs, because they would not produce any significant redistribution of income. Also, overheads would be covered out of consumers' surplus, and therefore the 'optimum' work-leisure condition would not be further disturbed by an increase in general taxation The same argument may also, to a lesser extent, support the covering overheads out of local rates.[3]

[1] Loc cit, p 259

[2] Loc cit, p 178. Of course, a lump-sum tax scheme could theoretically remove this difficulty But, then, lump-sum taxes are neither ordinary, nor practical

[3] See Henderson, *M S*, p 239

A. M Henderson also considered income distribution He quoted the Hotelling–Hicks justification for ignoring it, but appeared to agree, in the main, with Mr Coase. He wrote·

> And, in fact, in most countries we find complaints that state help in this field has benefited some areas or some classes at the expense of extra taxation borne by the whole community Such charges are almost incapable of disproof, and, whether they are justified or not, there is some objection to a policy which is almost certain to provoke them [1]

This appears to introduce income distribution as something which is external to economic welfare, which has to be considered only as a matter of political expediency. But as we have emphasized, the question of income distribution is logically prior to the question of the ideal output We should also notice that the sort of complaints to which A M. Henderson referred may not be complaints so much about income distribution as complaints of inequality of treatment by the government; or they may result from the view that 'he who benefits ought to pay', an ethical view which is independent of views about income distribution and may well be inconsistent with them. It is, after all, quite possible to hold that *A* ought to pay on the ground that he benefits, but not pay on the ground that he is poor

This brings us to Professor Lewis's article. It is particularly interesting because it introduces moral arguments, which are external to welfare economics, in the sense in which we defined the word 'economic'. By definition, under the heading of economic welfare, we have concerned ourselves only with the amount of things each individual got, and with how much of each he ought to have Professor Lewis is, however, interested in the reasons why a man gets what he does. He appears to relate the amount an individual ought to have to the functions he plays in the economy. This is a view which has dropped out of fashion recently. Welfare theory admittedly tells us that a man ought to be paid the value of his marginal product, but it is not supposed to relate the amount he ought to be able to consume, ex tax, to his marginal productivity, or to anything else Welfare economists, where they consider income distribution at all, usually seem to assume that the 'ideal' distribution is something which is quite independent of the amount of work individuals do, or the risks they take, &c

[1] Henderson, *M S*, p 230

Professor Lewis argued that if price is not equal to short-run marginal cost, then specific equipment is used less than it ought to be. Thus, like most of the other contributors, he appears wrongly to have assumed that there is a strong prima facie case for an output at which marginal cost equals price. But against the advantages of an 'ideal' output there are, he maintained, certain disadvantages to be set. He argued that, if there is excess plant capacity, then setting price equal to 'immediately escapable' (short-run marginal) cost may mean that amortization quotas will not be earned on that part of the plant which has to be renewed. Thus short-run marginal cost may be less than long-run marginal cost Only one reason, which is applicable to public concerns, is given as to why this would be a bad thing. He wrote·

> This transfer of income to the consumer is a gift which he never expected, to which he has no particular right, and which he will receive only temporarily while the excess capacity lasts [1]

It appears, then, that Professor Lewis considers that a consumer ought to pay the whole long-run average cost of anything he consumes. This is a kind of value judgement which is, by definition, extraneous to our concept of economic welfare That does not in the least mean that such value judgements as these ought to be ignored. On the contrary, they may be very important People undoubtedly do think in terms of 'Is *X* entitled to *Y*?', 'Has *X* a right to *Y*?', 'Is *Z* a fair price?', 'Why should I pay for Smith's wig?', and so on These moral ideas may be connected with property, or the labour theory of value (which is itself, at root, a property concept One has a right to, that is, a property right to, or right of ownership of, whatever one has 'mixed one's labour with') Or they may not be amenable to any particular classification But, in any case, they will always play a considerable part in any decision as to what policy is the right policy. They are welfare arguments, though not, by our definition, economic welfare arguments

Apart from the long-run divisible and escapable cost (long-run marginal costs), it is also argued that escapable *indivisible* costs ought to be covered 'if the retention of these resources by the consumers is to be justified',[2] Again we have the same argument. It must be noticed that, although Professor Lewis, as well as Mr.

[1] Loc cit., p 237.

[2] Loc cit , p 239

Coase, used this argument in support of multi-part tariffs, or discrimination, his argument had quite a different basis from that of Mr Coase The latter was concerned with an ideal real income distribution As I have pointed out, Professor Lewis was concerned not so much with the amount consumers consume (he never mentioned real income distribution) but with their *right* to consume what they do Although he advocated discrimination, he also recognized that, in some cases, discrimination would be regarded as unfair. For example·

> The man who has to cross Dupuit's bridge to see his dying father is mulcted thoroughly; the man who wishes only to see the scenery on the other side gets off lightly. The public's attitude to price discrimination is not capable of rational exposition Broadly speaking, it dislikes discrimination, but special cases are tolerated Discrimination according to income is accepted from doctors, the Government, or electricity undertakings, and used to be accepted from shopkeepers, but would now probably be resented if tried by the baker or the 'bus conductor On the railways it is freely accepted as between commodities, but not as between different parcels of the same commodity [1]

Nevertheless, Professor Lewis went on

> Where there are escapable indivisible expenses to be covered, the case for discrimination is clear It secures an output nearer the optimum, and levies the indivisible cost on those who get the greatest benefit (measured by their consumers' surplus) from retaining the indivisible resource in this line of production

But why is the case so clear? There are two arguments in favour of it. First, the gainers could conceivably overcompensate the losers, and, secondly, those pay most who benefit most But against it there is the argument 'people ought to be treated equally', i.e 'there ought not to be discrimination' The conclusion depends on the weight one attaches to these arguments If, in general, it is true, as we have argued, that the conclusion that the gainers could overcompensate the losers is almost always an extremely shaky deduction, then perhaps one's dislike of discrimination might outweigh the pay-most-who-benefit-most argument

There may also be inescapable costs. If price covers only escapable costs, the undertaking will show a loss Professor Lewis argued that there is no reason why the mere fact that resources have been specialized (that certain costs are bygones) should

[1] Loc cit, p 7

throw the cost on investors or anyone (e.g. taxpayers) but those consumers for whose benefit the resources have been put into their present form. Only if there is overcapacity due to mistaken foresight should the investors (or taxpayers) bear some loss, price should still cover the cost of that part of the permanent assets which is in use. Finally, the point is also made that the nuisance of rapidly fluctuating prices may outweigh the advantages of a moment-to-moment adjustment to supply and demand Thus the conclusion is as follows

. price should not fluctuate irregularly, should cover not only short-run but also long-run marginal cost, not only long-run marginal cost but also, preferably by way of price discrimination, escapable indivisible cost as well, and not only these, but as much of the non-renewable assets as can be extracted from consumers' surplus by price discrimination (but only to the extent to which such assets are actually used) [1]

But how did Professor Lewis weigh his different arguments in order to arrive at this conclusion? It seems that he thought that, even if discrimination is impossible, price should cover long-run marginal costs and escapable indivisible cost as well It is evident, then, that he considered that the he-who-benefits-ought-to-pay argument outweighed the ideal-output argument (Professor Lewis admittedly regarded inability to earn amortization quotas as, in itself, an argument in favour of covering these costs—but why is it an argument in the case of public utilities? No reason was given) We can also gather that this argument, in conjunction with the ideal-output argument, outweighs a possible dislike of discrimination. Finally, he appears to imply that non-renewable assets need not be covered, unless they can be covered out of consumers' surplus (when they ought to be covered) The two arguments in favour of covering the permanent assets are, first, that he who benefits from the specialization of resources ought to pay, and, secondly, that investors (and taxpayers presumably) ought only to lose as a result of mistaken foresight [2] But suppose discrimination is impossible Then it appears to be implied that the permanent assets need not be covered, in which case the above two arguments are overruled By what? Apparently only by the ideal-output argument There thus seems to be an unexplained shift in the weighting of the arguments as we pass from escapable indivisible to inescapable costs

[1] Loc cit, p 246

[2] Loc cit, p 246

I, and many others, will find some of Professor Lewis's value judgements acceptable To the extent that they are acceptable, it follows that the economic welfare calculus, with its limited value premises, is inadequate to decide the kind of question which we are trying to decide. It is notable that A. M Henderson, in his summing-up of the controversy,[1] ignored these extra-economic value considerations, confining himself to economic welfare as we have defined it We say this in order to emphasize our view that the economic welfare calculus, even given all the value judgements required in order to apply it, is an inadequate instrument. It should also be noticed that many people would want to say that the considerations raised by Professor Lewis are *economic* considerations.

We must now consider some further objections which have been raised against marginal-cost pricing As we suggested in the previous chapter, the output and pricing policy adopted cannot, in practice, be treated as independent of investment criteria This was pointed out by Mr. T Wilson in the following passage

. . In theory one must then fall back upon consumers' and producers' surpluses and engage in the pleasant diversion of measuring areas under a series of curves Unhappily such a procedure . could yield a large variety of answers from which anyone with an axe to grind could take his choice Probably the only way to get at any sort of approximate answer would be to consider whether it would be possible to cover the total costs of the undertaking if it were run monopolistically. This is the sort of forecast which the monopolist himself has to make, so presumably a rough answer could be obtained. There is, however, this difference. Since the monopolist will try to exploit to at least this extent, he will have some check on the accuracy of his forecasting A socialist undertaking run according to the Rule[2] will have no check at all, and will, therefore, be unable to build up the experience which the monopolist will possess [3]

It may be argued that the question of new investment would not arise, because a larger output can always be obtained from the same plant, if output is adjusted until price equals marginal cost, and if marginal cost is, at that output, less than average cost This, however, only applies when the investment is for the purpose of providing more of the same good in the same market For instance, one cannot say that it is wrong to build another ship, or run

[1] *M S*
[2] See A Lerner, *Economics of Control*, p 64 (my note)
[3] Loc cit, p. 458

another train, because there are empty berths or seats on those one already has The above objection may apply to the gas or electricity supply of a single town or district. But, even then, if one is considering the extension of such services to a new, but similar, market, it would be very helpful to know whether those services in the old areas could have paid their way. If we were wondering whether to build an underground railway in Glasgow, it would certainly help to know whether one in Birmingham could run at a profit. Thus, if we are considering the best output criterion for nationalized undertakings in general, we must not confine our attention to the case of public utilities which have a homogeneous product, and are already fairly fully developed, without much fresh territory to conquer

Mr. Wilson's argument, especially when taken in conjunction with the well-known 'empire-building' argument, undoubtedly provides a strong reason for making the managers of a socialized undertaking cover total costs somehow. It is a strong argument, because there is no practical alternative criterion to profitability; and because the results of misinvestment can be much more harmful than a failure to achieve from moment to moment an 'ideal' output from a given plant, even supposing that there is such a thing in the real world as an 'ideal' output, and even supposing that, if there were, it could be discovered in practice

The question of efficiency has also been raised [1] By 'efficiency' we mean efficiency in attaining the lowest possible cost for a given output, given the plant and the prices of co-operating factors A M. Henderson excluded operating efficiency as a consideration because 'all systems of pricing of public utilities abandon the automatic incentive to efficiency which is supplied by the profit motive'.[2] This does not, in itself, seem an adequate reason Dismissal for inefficiency might well be an incentive In which case different systems could theoretically be evaluated according to the extent to which they make the discovery of inefficiency, in the above sense, possible. Nevertheless, Henderson may be right Whatever the system, operating efficiency shows up only on the cost side High costs can, in this field, often be prevented from showing themselves in the profit and loss account On the other hand it may be argued, possibly with some justification, that subsidization, even when the subsidy is fixed, tends to make

[1] Meade and Fleming, pp 323–4 and 335–7

[2] *M S*, p 234

managers think that costs do not matter very much, and tends to make them careless about efficiency Again, it is quite possible that an instruction to maximize profits would be more of an incentive to efficiency than, for instance, the instruction to cover average costs (especially if it was all too easy to cover them), although the profits earned would not directly benefit the managers.

Mr Norris raised the problem of common costs (which may, however, be exceptional in public utilities), marginal costs are then indeterminate; and, even when there is only one product, they cannot be very precisely determined[1] Professor Lewis has also made the important point that marginal cost may include some user cost.[2] A. M. Henderson remarked on this, and emphasized that user cost involves a guess at the unknowable, and that marginal cost ceases to be an objective magnitude and becomes, in part, a guess about the future He added

> I feel that there can be no doubt that the marginal cost principle is disqualified from being the sole or even the main principle of pricing on the score of administrative difficulty. It fails to supply a principle which is clear and unambiguous, and it is not possible for inspection to enforce compliance.[3]

The general case against marginal-cost pricing is clearly overwhelming All the arguments, even the rather dubious purely theoretical ideal-output argument, are against it. In general, there is nothing to be said for it, but, in particular cases, some of the arguments could tell in its favour. First, it is conceivable that the distribution-of-real-income argument might be held to be favourable This is only likely to be the case when the consumers of the product of some public utility are more or less coincident with some social, or income, class or group But this may happen For instance, it might be desired to redistribute real income in favour of the inhabitants of undeveloped areas Charging for electricity at marginal cost would tend to have this effect. Secondly, in certain cases the ideal-output argument may be in favour This is the case when marginal cost is zero A zero marginal cost means that the good in question could not be transformed into anything else. Therefore the complication engendered by the fact that price is not equal to marginal cost elsewhere does not arise Moreover, when marginal cost is zero, all the other 'optimum' conditions of

[1] Loc cit, p. 58.
[2] Loc cit, p 232
[3] *R E S.*, p 17

production and exchange do not require to be satisfied If marginal cost is zero, one can be fairly sure that some people could be made better off without making anyone worse off, simply by lowering the price Admittedly there will be some small production changes elsewhere, both on account of substitution and income effects. But, at least, the deduction is very much less shaky than when marginal cost is not very small.

It should be noted that zero or near-zero short-run marginal cost is very common. We may instance museums, parks, bridges, passenger-trains and buses, broadcasting, water-supply, and sometimes even roads (certainly in the case of light traffic) It at once springs to mind that usage of most of these facilities is already free at the margin. Museums, parks, bridges, and water normally cost one nothing to consume. The charge for one's wireless licence does not vary with the amount one listens Roads are free except to motorists, who pay a small charge for immediate usage in the shape of the petrol tax They are entirely free to pedestrians and bicyclists. This is, presumably, because marginal-cost pricing is supported by the common-sense value judgement, 'Surely people should be allowed to use something as much as they like if it costs nothing' We may ask why an exception is always made in the case of transport There is nothing more obvious than that, if a bus or train or ship is running half-empty, it would cost next to nothing to carry an extra passenger Part of the answer lies in the equation of supply and demand. Museums, parks, and bridges are not often full. Broadcasting has an infinite capacity, and can never be fully used. The theoretical pricing rule, when marginal cost is zero, is 'Lower price until the service is fully used—if necessary to zero' This could hardly be done in the case of buses or trains Everyone would wait until the last moment for the price to come down, when there would be a horrid scramble It would obviously be impracticable to hold an auction at every station at which the train stopped. Equally, if transport were free, there would be no criterion for when it was desirable or not to make an indivisible change, i.e. run another bus, or another train Also the 'ideal' would not be attained People who wanted to travel very badly would be crowded out by joy-riders, who would not have travelled if they had had to pay anything

Administrative impossibility, fluctuating prices, and the leaving of an enormous number of small but indivisible changes to the

whim of the manager, combine to make marginal-cost pricing impossible in the case of transport. It should be noticed that those who believe that the road–rail question can be settled on marginal-cost principles do not consider true marginal cost They average costs to some extent, thereby ignoring some consumers' surplus. It is obviously right to do so. But it means that the best resolution of such problems is a matter of judgement, and not of scientific principle. When, for instance, A M Henderson wrote, ' . The inefficiency arises from attempts to force traffic to go by rail when the marginal cost is lower than for road transport, although the pricing system is such that the road charge is the lower',[1] he means that, say, an extra 100,000 passengers per annum could be carried by rail at an average extra cost per head which would be small compared to the average extra cost if they went by road. If we really followed short-run marginal cost principles, the road–rail problem would certainly not be solved. In such cases as this, one can only take 'marginal cost' in a very broad, and theoretically illegitimate, sense.

This leaves us with such things as water, museums, parks, broadcasting, roads, and bridges. They are free at the margin, except for motor-traffic on the roads The arguments against them being free, are (*a*) that there is no criterion for when to build more museums, roads, &c , and (*b*) that their costs may contribute to marginal taxation Where such things are provided for out of local finance, the danger of over-development is not very serious The ratepayers would have something to say, and in the end the district would lose population Also marginal taxation is not thereby increased. With broadcasting the danger is also slight, and, again, the costs are (more than) recovered from consumers Moreover in many of these cases broader considerations of welfare and culture would, in many people's minds, justify a development which could not be justified by any purely economic argument. The case of roads is more difficult. The lack of any good criterion could lead either to underdevelopment or overdevelopment In practice, in England, where something is financed through the central budget, underdevelopment is more likely in cases where political emotions are not strongly aroused Overdevelopment is more probable where the investment is self-financing, and the undertaking is better placed than others to draw upon the public's

[1] *M S*, p 241

consumers' surplus But if some check on investment in roads were required, it could be provided by limiting the investment to such as can be financed out of consumers' surplus, by vehicle taxation and local rates This is, of course, no answer to the question 'Should a particular new road be built from *A* to *B*?' The theoretical answer would require at least an estimation of consumers' surplus on this particular road, and of loss of producers' surplus on the railways. No tolerable system of pricing could possibly yield an automatic investment criterion here. It appears, then, that the investment-criterion argument cannot be used against a free road system though, paradoxically, there may be a case for tolls if desirable development is being retarded by the exigencies of central finance

Let us now sum up the argument as far as we have progressed. First, we may say that when marginal cost is zero there is a good prima facie case for making the service free. When there is also some investment check, and the losses can be covered other than by marginal taxation, and in an equitable manner, then the case for making the services free, or almost free, is well established. Second, when marginal cost is not small, but average costs are considerably higher than marginal costs, there may be a weak prima facie case for charging somewhat less than average cost for the service, but never for actually charging marginal cost The prima facie case is stronger (i e we could have more confidence that the gainers could overcompensate the losers) the lower marginal cost is in relation to average cost It only becomes very strong when marginal cost is zero, and the overheads could be covered without upsetting the 'optimum' conditions.

The prima facie case may often have to be over-ruled by one or other of the arguments mentioned above. But, if marginal cost is zero and nothing is charged, or if the policy is to charge rather less than average cost when there is a large divergence between average and marginal cost, then the objections (*a*) that marginal cost is indeterminate, and (*b*) that the instruction 'produce until price equals marginal cost' is administratively impossible, or would result in inconveniently fluctuating prices, do not apply These are really only strong objections against trying to operate the Lerner 'rule'. The objections to the prima facie case which have so far been raised and which remain are

(*a*) a possible unfavourable redistribution of income;

(*b*) the he-who-benefits-should-pay kind of argument,
(*c*) the lack-of-a-criterion-for-indivisible-changes argument,
(*d*) the fact that it may be impossible to cover overheads without increasing marginal taxation,
(*e*) the fact that subsidization may tend to cause inefficiency by encouraging the idea that, since there is no harm in making a loss, costs do not matter much

Some of the above objections will apply in some cases and not in others. The extent to which they will apply depends very much on the method chosen for meeting the loss which will arise from reducing charges below average costs A M. Henderson has reviewed the different methods in this light [1] There are, broadly speaking, three possibilities—national taxation, local taxation, and price discrimination by means of multi-part tariffs [2]

The first possibility, national taxation, is clearly the worst. It implies an increase in taxation at the margin of effort, and will also normally result in an increase of indirect taxation. It also implies subsidization with, possibly, a consequent decrease in managerial efficiency. These effects may offset what would otherwise be the theoretical advantages, even in cases where marginal cost is zero To some extent one's common-sense judgement is warped in such a matter, because the benefits of making a service free are, in some cases, obvious. The offsetting effect of increased taxation is very widely spread, and any ill effects will scarcely be noticeable if only a single case is considered. When, however, taxation has already reached a high proportion of the national income, it may be worth while to guard against this form of myopia Furthermore, all the other three arguments (*a*), (*b*), and (*c*) may weigh against it There is likely to be some income redistribution, which might be unfavourable. Some people will pay for benefits they do not receive, and there is no check on 'empire-building' investment It would clearly be very difficult to find a case in which one could, given any plausible set of value judgements, say with some reasonable degree of confidence that it would be right to reduce price below average cost, and finance the cost by an increase in general taxation (i.e adopt the Hotelling–Lerner solution)

[1] *M S*

[2] Where there is a multi-part tariff, when I refer to the charge or price, I mean the charge which varies directly with the amount of the good or service consumed by the individual, e g the charge per kilowatt-hour for electricity, or per therm for gas.

The second method is local taxation in the form of rates. Where the benefits of the public service are local, this means of payment is superior on all counts to national taxation. Marginal taxation is not increased, subsidization is not required, redistributional effects are likely to be small, and, broadly speaking, those who benefit pay[1] Furthermore, there is much more likely to be a check on investment Where the benefits of the service are widespread, however, this method of payment can be ruled out by the redistribution and the he-who-benefits-should-pay argument For instance, if a large and expensive bridge was built to carry national roads and railway lines, no one would argue that it ought to be a charge on local rates

The third method is the multi-part tariff This method may not enable the 'ideal' output to be produced The overhead charge will normally have to be greater than the expense which can be directly attributed to each consumer (e g. installation charges for electricity, &c.), and certain people who would just be willing to pay consumer cost may be excluded. Motor-car taxation will, for instance, exclude a fringe of would-be motorists Alternatively, the variable charge will have to be greater than marginal cost. The multi-part tariff is, in fact, only an approximation to the theoretical 'ideal' of perfect discrimination This we would not hold as a serious argument against it. As we have seen, *the* ideal output only exists in theory. Except when marginal cost is zero, and overheads can, in fact, be met out of surplus of some kind, it is indeterminate And, in any case, we have seen that the theory, which lies behind the concept of an 'ideal output', has at best only a very rough and ready application to the real world. It is a mistake to suppose that anything except a very rough approximation to the 'ideal', even when it is theoretically determinate, can be confidently held to be beneficial. On all other counts the multi-part tariff is superior, even to a charge on rates, where it is applicable If the charge is on rates, some will pay who get no benefit. Similarly, a multi-part tariff prevents any significant redistribution of income, which is, on the whole, likely to be an advantage. It also provides a check on investment. The finance of the undertaking is autonomous.[2] This may be an advantage, because those who are experienced in the running of the business can take all or most of the decisions. Furthermore, the

[1] This would be more true if full rating of industrial and agricultural property were restored

[2] See Henderson, *M S*, p 234

managers have a reasonably definite pricing system, and they can gain the experience necessary to decide whether some new undertaking would pay for itself with that pricing system But the danger of any generalization must be noted at this point If of two strongly competing industries one can exploit a multi-part tariff, and the other cannot, the first may be overdeveloped relative to the second This is very probably the case with gas and electricity in England.[1]

There is one special disadvantage of the multi-part tariff; it normally involves discrimination, which may be thought to be unfair The larger the difference between marginal and average cost, and the nearer to marginal cost one tries to get, the greater the discrimination would have to be Whether discrimination can be worked in this way depends mainly on whether suitable impersonal categories (e.g. size of motor-car, or house) can be found as a basis for discrimination. In my judgement, and for the usual reasons, it would be folly to strain after the 'ideal' by attempting to discriminate in a manner which would be regarded as unfair Here my emphasis is rather different to that of Professor Lewis, simply because I do not believe one can attach much weight to the 'optimum' output argument.

We can safely conclude that where it is possible to finance losses, due to charging less than average cost, either by means of the rates, or better still by a multi-part or two-part tariff, then the case for reducing price below average cost (assuming that marginal cost is substantially less than average cost) is very much stronger than if part or all of the loss has to be borne by national taxation Where these methods are not available, and therefore the whole loss would have to be borne by general marginal taxation, and where the service is one that is consumed by individuals,[2] then I

[1] See I M D Little, *The Price of Fuel*, O U.P , 1953, chs v–vii

[2] Henderson (*M S* , p 237) treats defence as a public utility paid for out of general taxation. But things such as battleships are not consumed by individuals —and they play no part in the 'welfare' scheme we examine It is absurd to say that defence ought to be financed through general taxation arranged so that the taxpayer pays no more than the consumer's surplus he derives from it Ought those, who would not be willing to contribute anything to defence, to have their income-tax reduced? Individual preferences play no part where there is no mechanism by which they can be expressed When people vote, they do not vote on particular issues, and, in any case, the price mechanism is not a 'Yes'-'No' affair There are no wasted votes, and no minorities This is remarked on, because there is a tendency to pretend that consumers' preferences are expressed in the same sort of way through the ballot-box as they are through the price mechanism.

think we would, at least, require to have the following conditions satisfied:

(*a*) either that almost all individuals benefit to some extent, or that the income redistribution would be favourable;
(*b*) that marginal cost is very small in relation to average cost,
(*c*) that a multiplicity of indivisible decisions is not, as a result, left without any criterion

Can we pause at this stage of the argument and draw any general conclusions? The only conclusion that seems to emerge is that nationalized industries should *at least* aim to cover total costs, and even here one might occasionally want to make exceptions But the fact that one cannot draw up general rules as to tariffs and output policy must not be taken to imply that the economist has no contribution to make to the problem in particular cases. We have earlier dismissed the idea that the ratio of price marginal cost should be made equal to some average (unknown) value for that ratio in the economy We have also seen that there is nothing ideal about the 'proportionality' thesis [1] But that is different from saying that relative prices and relative marginal products do not matter. We saw that the idea lying behind a rise or fall in a price marginal-cost ratio is the shift of factors to industries where the value of their marginal product will be greater.[2] Now where a good has one or a few strong substitutes, and where the demand for these goods taken together is inelastic, one may be able to predict the direction that these factor movements would take and hence be able to predict, with fair confidence, that an increase in the national income would result from a change in pricing policy [3] One may also of course take into account the possibility of changes in factor supply, in income distribution, and external economies But the point is that detailed study may well enable one to make recommendations with some confidence; in particular cases many of the general objections to the application of 'welfare' analysis may be seen to have little weight In my opinion this detailed approach is the proper one to make. and generalities about price marginal-cost ratios, or the use of particular kinds of tariffs, are rather useless,

[1] See pp 162–5 above
[2] See pp 162–3 above
[3] It has been emphasized in earlier chapters that this is not sufficient evidence, even combined with a favourable redistribution, that such a change is desirable but, while insufficient, it is still evidence.

and may easily be worse than useless This, however, is not the place to descend into such detail [1]

Let us return to generalities concerning the price and output policy of nationalized industry There is one problem we have not yet mentioned, the solution to which has some bearing on the output of nationalized industries This is the problem of deciding what total costs should be deemed to be It may, at first, seem surprising that there should be such a problem, which certainly does not exist under private ownership. It is the case, however, when an industry is nationalized, that its overhead costs are determined by the compensation paid to the dispossessed owners. There can certainly be no particular reason why its overheads should be fixed in this way, because the amount of compensation is itself determined by varying methods, and may be quite arbitrary If overheads are not necessarily to be related to the compensation paid, then how are they to be fixed? This apparently opens up the possibility that they can be adjusted until 'covering total costs' would amount to the same thing as 'producing until marginal cost equals price'. Average cost could be forced into equality with marginal cost

This is, of course, a silly suggestion It inevitably does away with the whole object of covering total costs, and is open to all the grave objections which have been made to the policy of producing until price equals marginal cost, covering the overheads by national taxation Moreover, if we require that covering overheads should provide experience which helps to decide whether new investment in a new but similar, or imperfect, market is desirable, then it is important that the nationalized industry should start off with overheads which bear some reasonably close relation to the value (in some sense) of the equipment and goodwill which it takes over

The last consideration mentioned above would appear to give us at least one reason for valuing the overheads of a nationalized industry in a particular manner. It is a commonplace that the historical cost of equipment is irrelevant, and that it is the replacement cost that matters But the reason for this, and the reason why *all* overheads are not irrelevant, is not always made clear The reasons are, first, that depreciation should be based on replacement

[1] My *Price of Fuel* is an example of the method I suggest The matter is further discussed in the preface to that book.

costs and should be covered by price, if the often more or less routine investment of depreciation funds is to be under the direct control of the undertaking itself, and, secondly, that only if capital is valued at replacement cost is the experience gained in covering total costs of greatest value as a guide to making new investment decisions. Is it, however, adequate to say that the overheads should be determined by replacement costs? A. M Henderson has discussed this question The problem, as he set it, is to determine how much the industry should pay to the Exchequer after covering its current expenses. This becomes the problem of determining the valuation that is to be set on its capital equipment, since the annual payment will then be determined as the normal yield expected on an investment of this class To quote

What is relevant is the replacement cost of the equipment, and this should be the basis of valuation In this way, there is an automatic increase in the amount of the annual payment in periods of high prices and a fall in periods of depression [1]

He went on to say that this basic replacement-cost figure needs to be modified, because some of the equipment would not be replaced if the decision had to be taken anew He wrote. 'In this case, we require the highest price we would be willing to pay to replace this equipment.'[1] Only in this case? Suppose that we would be willing to pay more than replacement cost? If windfall losses are to be subtracted, presumably windfall gains should be added. He continued

The sum we are seeking is the current value of the equipment such that, if a normal return is paid, then the taxpayers will not be subsidizing consumers of the product of the industry, though they will bear the capital losses from investment which has turned out to be unjustified.[2]

This appears to be the sum we are seeking, because, he suggests, we really want to ask ourselves what we would be willing to pay to replace the equipment It does not seem clear why this is the question we should ask ourselves unless, either for reasons of income distribution or for reasons such as Professor Lewis's, we think that taxpayers ought to bear the losses of mistaken investment, and ought not to have to subsidize consumers In any case capital valuation on the basis of a normal return does not seem to

[1] Henderson, *R E S*, p 21

[2] Ibid.

be a modification of the replacement-cost principle It seems to be a quite different and alternative basis of valuation

Suppose that, in accordance with this scheme, the capital value is, on takeover, determined by multiplying the current profits by the number of years purchase corresponding to the yield expected by investors on an investment of the same class. The annual payment is thus apparently equal to the profits before nationalization, and the pricing policy remains broadly unchanged so long as operating costs remain the same Alternatively, if no account is taken of risk, and the interest charge is determined by gilt-edged rates, then the annual payment would be somewhat less than the pre-nationalization profits, and price could be slightly reduced.

A new investment after nationalization will then be made if the industry convinces the Exchequer that it will thereby be able to increase its annual payment in proportion (assuming that the normal yield does not change), given that it continues to charge the same price [1] If the investment is made, and the expected yield does not result, then a higher price must not be charged The implication is that the new capital must be revalued in accordance with the actual yield of the new investment, otherwise, the taxpayers would not be bearing the loss [2] The annual payment of the industry would thus be adjusted up or down according as new investment was successful or the reverse This would mean that a mistaken investment would appear to be immediately condoned As far as the industry and the public was concerned, its mistakes would be covered up as soon as made—and likewise its successes. This might not be a good thing

Admittedly it does not follow from the mistake of, say, erecting an unnecessary factory that one should make the further mistake of not using the factory in what might be, in theory, in the short run, the best manner. On the other hand, if overheads are always adjusted so that the average cost of this factory is covered, then there remains no obvious indication that the industry is now too

[1] Cf Henderson, *R E S*, p 23

[2] Apart from this revaluation, the annual payment scheme seems to come to the same as that advocated by E F M Durbin, 'Economic Calculus in a Planned Economy', *E J*, Dec 1936, where he says 'Make the largest output you can consistent with earning normal profit on the cost of replacing your plant When through a change in market conditions you cannot earn normal profit at all, then earn the biggest profit you can' This instruction is subject to the same objections as we make to the annual payments scheme

large If the annual payment was not adjusted then the industry might use its monopoly power in order to meet its obligations. The taxpayer would not then pay the penalty of the mistake, but at least the consequent increase of excess capacity would indicate that the industry ought to contract Equally if the new investment was particularly successful, a resultant increase in overhead charges might tend to hide the fact that further expansion was desirable. Again, if demand increased or decreased, there would be similar reasons against immediately adjusting the annual payment upwards or downwards. There are thus arguments against adjusting overhead charges, more often than very occasionally, to what the industry can, in fact, pay when operating at or near full capacity.

Suppose, however, that a new investment failed to give the expected yield, not so much because costs or demand were miscalculated, but because there was a general fall in prices There is then a strong case for reducing the annual payment This would automatically occur if the equipment was revalued at replacement cost. Similarly, if there was a general rise in prices, not only the depreciation but also the interest component of the annual payment should rise The failure or success of an investment which is the result of a change in the general level of prices should not be attributed to the foolishness or wisdom of the managers, and there is no reason why such gains or losses should not be hidden. Furthermore, if the annual payment was not thus revised, output would be expanded or contracted as a result of a purely historical accident—the accident of whether the equipment was purchased when prices were relatively high or low—and this, at least, cannot be a good reason for a change in output policy

This somewhat clumsy idea of a fluctuating annual payment only results from the fact that we have presumed that the managers would be instructed to adopt a price which would enable them to pay the annual payment In fact, if interest on the capital value was charged at private industrial rates, we would simply have been discussing how we should vary the annual payment so that the managers, in taking it as their guiding star, would in fact maximize profits, or minimize losses, in the same way as they did under private enterprise.

We do not want to imply that, when an industry is nationalized, the equipment should be valued at replacement cost On the

contrary, when the new management takes over, there is no point in burdening them, even on paper, with the results of the past mistakes of others, nor indeed in valuing the equipment in such a way that they can pay an exceptional return from scratch. The initial valuation should certainly be made on a normal yield basis, and, unless there are special reasons (as there may often be) for supposing that the public has seriously underestimated or overestimated the prospective yield, or the risk involved, the Stock Exchange valuation may be taken (Although it is, of course, inconsistent to take the Stock Exchange valuation, and then require the industry to pay only gilt-edged rates on the value of the capital thus determined)

The trend of the discussion will probably have disappointed some readers, since the proposal so far is simply that there should be a capital reorganization at the time of take-over, and that thereafter the public monopoly should, as far as short-term output is concerned, continue to behave in the same way as the private monopoly would have done (although within the framework of covering total costs it may of course try to produce the 'best' output). The only difference is that the interest charge would be reduced if gilt-edged rates of interest were now charged.

A. M. Henderson suggested, however, that the amount of the annual payment might be modified for various reasons; thus it might have its annual payment lowered to make price more nearly equal to marginal cost, if the excess of average over marginal cost was unduly high, or, if it justified general encouragement because of defence requirements, indirect social benefits, or external economies. Alternatively, it might have its annual payment raised for the opposite kind of reason He added:

It may seem pointless to start with a more or less precise figure and then to submit it to a host of adjustments of so vague a nature The justification is simply that in many, if not most, industries there will be no very convincing case for making any of them.[1]

We certainly agree with this But, supposing that it was felt that some interference with monopolistic pricing *was* justified, we doubt whether this interference would best be made by means of an adjustment of the annual payment which the industry would be expected to make.

Let us suppose that the annual payment is reduced, so that the

[1] *R.E.S.*, p 22

industry is not, in effect, expected to cover its total costs, as we have tried to define them earlier. New investment would then be undertaken if it was expected that charging the same price for the product would permit the annual payment to be increased by sufficient to cover interest and amortization on the full cost of the new equipment, although the corresponding full interest charge would not necessarily be exacted.[1] It is clear that this involves a more exacting criterion for new investment than does profitability. The criterion is now profitability given a certain price less than monopoly price So long as the reduction of the annual payment is small, we cannot claim this as a disadvantage, since, as we saw earlier, profitability might err on either side of the 'ideal' If the reduction in the annual payment was, however, fairly large, an undue restriction of investment might result.

Further, if the annual payment was not increased by the full interest and amortization charge on the new equipment—which, if the investment were successful, could have been paid—then the price charged must be lowered. In that case the ratio of price to average cost would be changed. Evidently, if it is only 'correct' to make new investments which, at the same price as before, can cover their total costs, then, if the same average-cost: price ratio is to be retained, the industry must be required to pay the full interest charge. On the other hand, if the annual payment was, in the first instance, modified for general social reasons (for instance, if it was increased for distilleries), then we should presumably require that more, or less, than a normal return must be made on the new capital If the annual payment is to be modified for many different reasons, it is surely wrong to suggest a single investment criterion, to wit, 'make an investment if, on the basis of the old price, full costs can be covered'. If, for general social reasons, we wished to encourage or discourage an industry, we should correspondingly not want it to be able to cover total costs, or be more than able to cover them

We thus see that there would be a number of disadvantages if the annual payment was adjusted for some of the reasons specified First, it would make it more difficult to find a general investment criterion, and to judge the investment performance of the industry, and this, in turn, makes the problem of deciding on the right investments more difficult. Secondly, it would be clumsy Too

[1] Ibid, p 23

many reasons have been advanced for altering it; a change in the price level, a particularly successful or unsuccessful new investment; external economies and diseconomies; general social reasons, and so on. Thirdly, if it was correct to alter it for such reasons as A M Henderson put forward, there would be a temptation to alter it for more arbitrary non-economic reasons. Whether or not to alter it for reasons of general social advantage is a matter of judgement about which there could be considerable difference of opinion (indirect social benefits, external economies, &c , cannot be objectively determined). Decisions on such matters might, in a democratic community, well be aired in public, and therefore should not be lost to view as they would tend to be if incorporated in a change in the annual payment, which would also have to fluctuate with changes in the general level of prices, and with the success or failure of new investments

A M Henderson also suggested that, in addition to being able to vary the annual payment, the government may also give specific subsidies or levy special taxes.[1] Yet interferences on the ground of the price: marginal-cost ratio, defence requirements, and indirect social benefits, are apparently all to be dealt with by a variation of the annual payment. Indirect taxation is also included. Thus it is said ' the need for a contribution from indirect taxation is a reason for raising the annual payment in all nationalized industries' [1] Even unintentional subsidization, owing to the failure of an investment plan, is dealt with by varying the annual payment. What, then, is there left to be dealt with by means of specific taxes or subsidies? The important point about subsidies and taxes is that they are abnormal payments, they conflict with the established norm of covering total costs (however defined) Being abnormal, they attract attention. Therefore I would wish to rank as subsidies or taxes payments which should be subject to public discussion Among these I would include payments (or modifications of payments) to or from industries for reasons of general social advantage, external economies, defence, &c —and would even prefer to include among them any payment for the purpose of approximating to the 'optimum' conditions, because I believe that common sense, backed by public opinion, may often be a better guide than pure welfare theory in deciding whether a change would satisfy our criterion of desirability.

[1] *R E.S* , p 23.

But, even supposing that any special encouragement or discouragement of an industry is dealt with by means of taxation or subsidization, there are still disadvantages in a system under which output is determined by the obligation to balance after a certain annual payment is met. Suppose that there is an increase in the demand for the product, and that output cannot be quickly expanded. The same price must be charged if the industry is not to make too much profit. This would involve queueing or rationing or an increase in imports, which is certainly not, as a general rule, ideal. It would be wrong to suggest that the taxpayer ought never to benefit by the increase in demand. Certainly theory suggests that the price should be raised, and the exceptional profit made Only then is the product 'ideally' distributed (we have seen in Chapter IX that the 'optimum' exchange conditions are the least shaky of all the 'optimum' conditions, and that their fulfilment is presupposed by the 'optimum' production conditions) This argument admittedly may not apply in some cases, where income-distribution effects are important and cannot be compensated, but it surely applies in others Another disadvantage of the annual payment method is that it 'permits' losses (if the industry cannot avoid making a loss), but never permits exceptional profits, since these can always be avoided There may thus be a tendency for general taxation to increase Again, it is likely to be more difficult to aim at making a definite amount of profit from year to year than it is to aim at maximizing profit in the long run. This remains just as true if the instruction is to break even, taking the good years with the bad. All business experience is built up on the profit-maximizing basis Also, if too much profit is to be avoided, and there happens to be a tendency to make too much, then there may be little incentive to avoid waste The balance might be struck by inefficiency, rather than by increasing output

Some of the above disadvantages might be overcome if the instruction to break even was overridden by the instruction that the industry should always make as much profit as it could, consistent with operating at full practical capacity The abnormal profits, if any, should be reduced only by increased output as and when new investment made that possible This raises the question of what should happen to any exceptional profits made First, of course, they would be subject to profits and income-tax The residue could be retained if required to finance an agreed investment programme.

anything left should probably be paid to the Treasury It may be argued that, for political reasons, exceptional profits should not be made in a nationalized industry. They might, for instance, incite demands for wage increases This difficulty might be met by instituting a suitable purchase-tax if and when an industry began to earn a quasi-rent on its equipment. The purchase-tax would be removed when output could be expanded sufficiently to meet the excess demand [1]

Thus it is suggested that the annual payment be altered only for two reasons. either (*a*) because the general price-level, and therefore replacement costs, had changed considerably, or (*b*) for the purpose of writing off mistaken investment These capital reorganizations would be made only occasionally, when the need for them had become obvious. Secondly, it is suggested that the instruction to break even be overridden by the instruction that as much profit as is consistent with full capacity should always be made. If the average cost of marginal firms is more than covered, then output should be expanded through new investment Thirdly, if it is thought that interference is definitely required in order to make price more nearly equal to marginal cost, or for general social or military reasons, then this should be effected by means of taxation or subsidization

New investment should, in general, be undertaken if it is expected that its full costs can be covered, assuming that the same rate of taxation or subsidization (if any) remains This gives us the usual profitability criterion for investment, subject to the general encouragement or discouragement implicit in the taxation or subsidization of the industry Only if the taxation or subsidization is for the purpose of making price nearer to marginal cost do we tend to lose sight of the normal profitability criterion of investment We anticipate, however, that interference on the grounds of reducing price to make it nearer to marginal cost would seldom, if ever, be obviously necessary, except possibly in the case of fairly fully developed industries where investment was unimportant, and probably not often even in this latter case, since the greater output would usually be obtained by discriminatory pricing, or by local

[1] In some cases a permanent rent might be earned on intra-marginal units, in which case the Treasury should receive the abnormal profit corresponding to this rent In some cases, however, such rents will have been capitalized when the industry was taken over, and would therefore be included in the normal annual payment

taxation; and where it could not be so obtained, it would seldom, if ever, appear to be desirable.

Finally, we would add that control by price-fixing cannot be eliminated as a possibility In abnormal times, as when a particularly severe shortage develops, or when there is considerable inflationary pressure, then rationing and price-fixing may be required to ensure equitable distribution, or to prevent a wage inflation by holding down the cost of living

Some disadvantages still remain. Nothing in the above instructions serves to prevent an industry, which is faced with a chronic decline of demand, from exerting its monopoly power[1] to meet the annual payment in spite of the decline in demand Whereas, by the suggested overriding instruction, we have introduced some element of price flexibility when demand increases, no corresponding flexibility in a downward direction is in evidence Also there is nothing to prevent the industry from using one of its products to subsidize another There is also the already mentioned possibility that the instruction to break even may result in inefficiency, if and when it is very easy to break even

The above kind of consideration raises the question of whether it is not possible to introduce into public enterprise some element of competition. In other words, cannot profit-maximization sometimes serve in its traditional capacity as an output regulator? Thus it has been suggested that, for some industries, it would be better to have several boards which would compete against each other, rather than one central board There would, however, be disadvantages in not having a central board for an industry. In any industry there are probably certain economies of 'co-ordination', such as central research and the dissemination of information Perhaps more important in some people's view is the fact that the industry would become more difficult to control if there was no single central organization responsible to the Minister. In normal times this would not matter very much, and might be an advan-

[1] A public monopoly might have much more monopoly power than a private monopoly Whereas the ratio of price to marginal cost in the latter is seldom likely to be significantly different from the average 'degree of monopoly', this might not be true of a public monopoly Private enterprise, however monopolistic, is always limited by the threat of potential competition, or public control There is little evidence that the text-book short-run 'exploitation' behaviour is a real phenomenon On the other hand, the lack of the above threats might, in public enterprise, be offset by the increased influence of parliamentary, or public, opinion.

tage, but if we have to cater for the possibility of 'abnormality' then it might certainly be a disadvantage

But, in any case, the same presumed advantages, which would result from having an industry split up into a number of competing boards, could be rather better obtained with a central board, if that board adopted a suitable policy Thus, in a multi-plant industry, the individual plants, or mines, could be instructed each individually to maximize its profits If the product were homogeneous, or if there were a small number of homogeneous products, then each plant would behave as if in perfect competition Oligopolistic competition or restraints could be discouraged by the central board. In such a case the board would not be maximizing its profits. It would not control the price, and the individual managers would, in fact, be making price equal to marginal cost. But in an industry with rising costs, if the above policy was applied, losses would not result, indeed, considerable profits might sometimes be made. In that case most of the objections to marginal-cost pricing vanish, we would have the competitive industry of pure theory. In some cases this would seem to be the best solution

We believe that much the same solution could be applied to many imperfectly competitive industries (we beg the question of the definition of such an industry) There is no longer, of course, a single price, but many prices and many products The board would not itself be instructed to maximize profits, because that would, in the end, mean fewer and fewer commodities, and larger and larger plants. Standardization may be a good thing in some cases, and the central board would have to decide when it should be imposed, but the decision to standardize as much as possible should not be forced on it by the instruction to maximize profits The individual plants, or firms, would act without day to day interference as under private enterprise As we shall argue in a later chapter, welfare theory cannot tell us that resources are wrongly distributed within an industry of this kind, and there would be nothing to be gained, and possibly much to lose, by attempting to make each plant produce some abstractly defined 'ideal' output Such a solution does not imply that there are no possible advantages to be gained from nationalization in such a case Entry would be 'free', that is, abnormal profits would be taken as a sign that more plants and more products, or possibly more plants and the same number of products, are needed. Thus demand might become more elastic for

each plant. Purists could then take some comfort from the fact that price would be nearer to short-run marginal cost than it is likely to be under private enterprise, if entry is in any way restricted. The central board could also institute research, spread useful information on productive methods rapidly, and discourage any tendency to oligopolistic agreement

In both the above cases the central board would be responsible for investment policy, although subject to ministerial control In general it would seek to expand the industry when marginal plants were more than covering their average costs, and to contract it in the opposite case It would, in fact, have the guidance of the normal profitability criterion as to when investment or disinvestment was required, and in the imperfect competition case it would also have the guidance of profitability in deciding which lines of production should be developed, and which restricted

The above kind of scheme, whereby the central board of the industry exists in order to ensure that competition acts in the way in which it is supposed to act, has many advantages As far as managers are concerned their instructions are simple and stimulating, and what they are used to The board has the best practical guide for its investment policy.[1] Queueing is avoided when demand is in excess of supply, and, on the other hand, price reductions are semi-automatic when demand falls off. There is thus more flexibility than when an annual payment regulates output (the annual payment would remain as a datum-line of normal profitability for the industry, but it would not determine output).

But the above competitive solution,[2] which does away with the necessity of keeping a close watch on the annual payment, since that no longer determines output, is certainly not a universal panacea, although it might be widely applicable If, for instance, the industry consisted mainly of a few large firms with falling costs, then the instruction to maximize profits would not be determinate (some element of indeterminacy would no doubt always be present

[1] We showed in Ch X not only that profitability is the only practical and generally applicable guide, but also that it cannot, in the case of the imperfectly competitive industry without significant indivisibilities, be shown to be, even in theory, wrong

[2] A very similar solution has been proposed by Mr. C A R Crosland in his article, 'Prices and Costs in Nationalized Undertakings', *O E P*, N S, no 3, Jan 1950 I am indebted to the author for several of the suggestions embodied in this chapter

in any imperfectly competitive industry—but, in many cases, it would not be great enough to matter) Each firm would require to know what assumptions it should make about the behaviour of other firms. If each acted independently, treating price as a parameter, heavy losses might be made The competitive solution would then be open to all the objections urged against marginal-cost pricing, and more. The central board or the government would have to control the price Even if this were done the individual firms could not be allowed to maximize profits on the basis of the given price, because they would then make marginal cost equal to price,[1] and the board would find that the price, at which the resultant output could be sold, would involve it in heavy losses. Again we have all the disadvantages of the marginalist solution Therefore unless total costs can be covered by discrimination, resort must be had to average cost pricing. In which case the board must, in some way, control the output of the individual plants, so that overheads are covered. We are then back at the annual payment method of output determination.

In the above paragraphs some emphasis has been placed on nationalized industries making profits. The larger the nationalized sector the more important it becomes that this sector taken as a whole should make profits (and/or that some of its products should be taxed) The present nationalized sector is already large enough for it to be probable that the only general convention we have—that each industry should try to break even—is causing serious damage to the economy A very large part of the savings of the community comes nowadays from corporations. Indeed private corporations save more than they invest, in addition to which they make profits and pay tax on them, which is also a contribution to

[1] To let managers maximize profits on the basis of a fixed price, adjusted by the central board until supply equals demand, would be the only practical method of getting marginal-cost pricing That price is equal to marginal cost is, after all, a deduction from profit-maximization *with* a constant price—and whenever these postulates are realized, price is *by definition* equal to marginal cost This deduction, as is usual in economics, cannot be verified, because marginal cost is not precisely identifiable (including, as it must, user cost) It was a mistake of the advocates of the extreme decentralized marginalist solution to take the condition, 'let price equal marginal cost', which is the fundamental 'welfare' theorem implicit in the theory of pure competition, and attempt to apply it directly This cannot be done for the reason that marginal cost is not a perfectly objective magnitude The only possible way of getting marginal-cost pricing *is* by aping the postulates of pure competition theory, on the assumption that managers, when told to do so, do in fact maximize profits

governmental savings. The nationalized industries do not save at all; in fact they probably dissave although not supposed to do so. At the same time they are very heavy investors

Moreover, most goods produced in the private sector are indirectly taxed They thus make a contribution towards financing investment and government expenditure via indirect taxation, via contributing to the profit and income-tax of corporations, and via corporation saving In contrast the products of the nationalized industries probably make a negative contribution.

This may seem a far cry from welfare economics· but there is in fact an intimate connexion. The large volume of taxation required to be raised cannot be raised in any very ideal way. But it will almost certainly be raised in a worse way than it need be if a range of products is automatically made exempt from taxation, however good prima facie candidates they might be. Moreover the total volume of taxation required will be pound for pound higher the smaller the contribution of these same goods to non-governmental savings This is not to say that all nationalized industries should be expected to make some contribution to the finance of investment, or government expenditure But where it can be seen that a particular industry could make good profits without any apparent 'distortion' of output, then it seems manifestly wrong that it should throw the whole burden of finding the savings required for its own investment on to the government or the rest of the economy Where, finally, an approach to the best pricing policy would automatically result in large profits (as in the case of the National Coal Board) which would make possible the reduction of harmful taxation on other goods, the view that nationalized industries should *at least* cover costs becomes very much of an understatement

The discussion we have had in this chapter of some of the possible methods of running public concerns is only, of course, a sketch drawn mainly, though not entirely, from the economic point of view However, it suffices, I think, to show that there is not any one best method. From the economic angle we have to conclude that the best method depends on the nature of the product or products and on the nature of the industry Just as the latter part of this chapter showed that there is no one best method of arriving at a certain output, so the first part showed that there is no one way of determining what the best output is. The best output,

and the best method of arriving at it, are not indeed separable problems.

We can only decide what is the best thing to do in each particular case taking everything into consideration. The answer will be different in each case. And it will also depend on who decides, the problem is not a scientific one, about which we can expect to obtain universal, or almost universal, agreement The decision is influenced by many different considerations of different kinds which cannot be weighed in any very objective way

This whole chapter, and especially the latter part of it, has been somewhat of a digression from our main theme But it may have been useful to stray away from pure theory, and see what the theory looks like when one tries to apply it One cannot very well appreciate its usefulness, or lack of it, unless one watches it performing

CHAPTER XII

THE VALUATION OF THE NATIONAL INCOME

In Chapter II we used the condition $\sum p_2 q_2 \geqslant \sum p_2 q_1$ (the q's referring to quantities bought by some individual) as a sufficient criterion for saying that the individual chose situation II rather than situation I Similarly, if $\sum p_1 q_1 \geqslant \sum p_1 q_2$ we said that he chose situation I rather than II If these two conditions both held, a contradiction arose

We are now going to examine the same conditions when the q's refer not to quantities purchased by a single individual, but to the total quantities bought by a group of individuals Where the group is relevant we will use capitals (P's and Q's) and where the individual is relevant small letters (p's and q's) By a group of individuals we do not mean a collective A collective can be said to choose, and can therefore be treated as an economic individual, although it may be composed of many actual individuals. By definition, then, a group of individuals cannot be said to choose The recipients of the national income are assumed to form a group but not a collective, and we shall, in general, assume that the Q's of the formula refer to the total quantities of different kinds of goods comprising the (real) national income, and that the P's refer to the market-prices of these goods [1] When speaking of welfare, we use the same criterion for changes in an individual's welfare as we have used throughout ('on a higher behaviour line', or, if this cannot be known, the index-number criteria $\sum p_2 q_2 \geqslant \sum p_2 q_1$, and $\sum p_1 q_1 < \sum p_1 q_2$), and the same value judgements as before are presupposed.

From the above paragraph it follows that no obvious meaning in terms of choice attaches to $\sum P_2 Q_2 \geqslant \sum P_2 Q_1$ or $\sum P_1 Q_1 < \sum P_1 Q_2$. The first condition is shorthand for 'the money value of the real national income in period II is not less than the real income of period I valued at period II prices'. The second condition is shorthand for 'the money value of the real national income in period I is less than the real income of period II valued at period I prices' When we are concerned with an 'economic man', $\sum p_2 q_2 \geqslant \sum p_2 q_1$

[1] Let us, for the moment, assume that all goods comprising the national income are consumed by individuals and have a market-price

implied $\sum p_1 q_1 < \sum p_1 q_2$, this followed from the definition of consistency. But now that we are dealing with groups, $\sum P_2 Q_2 \geqslant \sum P_2 Q_1$ does not imply $\sum P_1 Q_1 < \sum P_1 Q_2$. It can easily be seen that the two sentences above, for which $\sum P_2 Q_2 \geqslant \sum P_2 Q_1$ and $\sum P_1 Q_1 < \sum P_1 Q_2$ are shorthand, are not contradictory. Even if every individual comprising the group was perfectly consistent, so that for every individual $\sum p_2 q_2 \geqslant \sum p_2 q_1$ implied $\sum p_1 q_1 < \sum p_1 q_2$, it would still not follow that we could not have both $\sum P_2 Q_2 \geqslant \sum P_2 Q_1$ and $\sum P_1 Q_1 \geqslant \sum P_1 Q_2$, when we summed the budgets of all the individuals.

Now it is usually thought that $\sum P_2 Q_2 \geqslant \sum P_2 Q_1$ contradicts $\sum P_1 Q_1 \geqslant \sum P_1 Q_2$, but this is only because these index numbers have been given meanings or definitions (apart from the obvious meanings given above) which make them contradictory. It is our purpose to examine the suggested definitions. Professor Hicks proposed such a definition in the following passage.

> Thus, what the condition $\sum P_2 Q_2 > \sum P_2 Q_1$ tells us is that there is some redistribution of the Q_1s which would make every member of the group less well off than he actually is in the II situation. For, if the corresponding inequality were to hold for every individual separately, it would hold for the group as a whole.
>
> As compared with this particular distribution, every other distribution of the Q_1s would make some people better off and some worse off. Consequently, if there is one distribution of the Q_1s in which every member of the group is worse off than he actually is in the II situation there can be no distribution in which everyone is better off, or even as well off. Thus, *if* we start from any actual distribution of wealth in the I situation, what the condition $\sum P_2 Q_2 > \sum P_2 Q_1$ tells us is that it is impossible to reach, by redistribution, a position in which everyone is as well off as he is in the II situation.
>
> This would seem to be quite acceptable as a definition of increase in real social income.[1]

[1] J. R. Hicks, 'The Valuation of the Social Income', *Economica*, May 1940. I have substituted capitals for the sake of uniformity. It should also be noted that, although the definiendum is here 'real social income', Professor Hicks seems to assume in the same article that this is equivalent to 'welfare'. Finally it should be noted that it must be the case that the condition shows that there is a distribution of the Q_1s, *in which the optimum exchange conditions are satisfied*, which makes every member of the group worse off than he is in the II situation. But the condition does in fact show this. See P. A. Samuelson, 'Evaluation of Real National Income', *O.E.P.*, Jan. 1950, p. 8, n. 1; also C. M. Kennedy, 'An Alternative Proof of a Theorem in Welfare Economics', *O.E.P.*, Feb. 1954.

Now, for some reason, it is supposed that a good definition of 'real social income' must pass the base-reversal test In other words, if $\sum P_2 Q_2 \geqslant \sum P_2 Q_1$ entails 'real social income is higher in II than I', then $\sum P_1 Q_1 < \sum P_1 Q_2$ must entail 'real social income is lower in I than II. It should be noted that this 'must' is a matter of elegance and convenience. There is no logical or philosophical reason why such a definition should pass the base-reversal test, because, as we have seen, the meaning of $\sum P_2 Q_2 \geqslant \sum P_2 Q_1$, which is implied by the conventional usage of the symbols, does not contradict the similar meaning of $\sum P_1 Q_1 \geqslant \sum P_1 Q_2$ When dealing with groups, there is no logical reason why we should not accept $\sum P_2 Q_2 \geqslant \sum P_2 Q_1$ as a definition of increased social income, and disregard the fact that $\sum P_1 Q_1$ may be greater than $\sum P_1 Q_2$.

Professor Kuznets has, however, criticized this Hicksian definition, saying that it must pass the base-reversal test [1] Now it is evident that, given the formula $\sum P_2 Q_2 \geqslant \sum P_2 Q_1$, it does not matter how the goods were distributed in the first period One can imagine the Q_1s were distributed in any way one likes in the first period With each such different distribution there would be a different set of prices (P_1s), but these do not enter into the formula Further, no distribution in the first period is logically inconsistent with our having arrived at the actual distribution and prices of the second period This enabled Professor Hicks to say that $\sum P_2 Q_2 \geqslant \sum P_2 Q_1$ proves that there could have been some distribution in the first period such that, if we had still arrived at the actual position of period II, the formula $\sum p_2 q_2 \geqslant \sum p_2 q_1$ would have held for every individual Thus $\sum P_2 Q_2 \geqslant \sum P_2 Q_1$ shows that, given the total quantities of the first period, the progress of history could conceivably have been such that every individual would now be better off This is the meaning of Professor Hicks's definition of an increase in real social income.

What then, is the correct base-reversal of this Hicksian definition? Using a formula based on the prices of the first year, we must see that the analogous argument holds Thus we must see that it is possible to redistribute the Q_2s in the formula $\sum P_1 Q_1 < \sum P_1 Q_2$ so that the inequality will hold for every individual Since the P_2s do not appear in the formula, it is obvious that this is the case. In other words, it is possible to distribute the goods of the second

[1] S Kuznets, 'On the Valuation of Social Income—Reflections on Professor Hicks's article', p 4, *Economica*, Feb and May 1948

period in such a way that each individual's first period income would have been insufficient to buy what he could thus have in the second period, if goods were suitably redistributed. Thus if $\sum P_1 Q_1 < \sum P_1 Q_2$ the base-reversal test is satisfied, and Professor Kuznets's criticism is met

But Professor Kuznets wrote

> But suppose we reverse the requirement, and ask whether it is impossible to make *everyone* as well off as in situation I by any redistribution of the actual quantities acquired in situation II. If it is impossible, then real income in I is greater than in II [1]

We now see that if $\sum P_1 Q_1 < \sum P_1 Q_2$, then it is always possible, by redistributing the quantities of the second period, to make $\sum p_1 q_1 < \sum p_1 q_2$ for every individual But, unfortunately, this is insufficient to show that everyone could be better off in the second period For that, $\sum p_2 q_2 \geqslant \sum p_2 q_1$ must hold for every individual ($\sum p_2 q_2 \geqslant \sum p_2 q_1$ implies $\sum p_1 q_1 < \sum p_1 q_2$, but the reverse does not hold true) What Professor Kuznets had in mind in suggesting that Professor Hicks's definition did not pass the base-reversal test was that $\sum P_2 Q_2 \geqslant \sum P_2 Q_1$ does not prove that $\sum p_2 q_2 \geqslant \sum p_2 q_1$ could be made to hold for every individual, by redistributing the quantities of the second period. Thus he produces an example of two classes, rich and poor, who consume respectively luxuries and necessities, and argues that even if $\sum P_2 Q_2 \geqslant \sum P_2 Q_1$, then we cannot necessarily make both rich and poor better off unless luxuries can be substituted for necessities [1]

This is perfectly true, but irrelevant to Professor Hicks's original definition.[2] Professor Kuznets goes on to say

> If we are to determine unequivocally an increase in welfare in situation II over situation I, we must assume not only a constancy of wants in the sense of a constancy of each individual's appraisal of different goods but also that either (*a*) all goods can be substituted for one another in the full range, or (*b*) the structure of the goods aggregate in the two situations is such that no specific good, to the extent that it cannot be replaced by another, is reduced in output [1]

Now if all goods are merely, in some degree, substitutes, the fulfilment of either (*a*) or (*b*) will only ensure that it cannot be proved

[1] Loc cit, p 4

[2] Professor Hicks in a comment on Professor Kuznets's article implicitly abandons his former criterion, and agrees with Professor Kuznets's criticisms ('The Valuation of the Social Income—A Comment on Professor Kuznets's reflections', *Economica*, Aug 1948).

to be impossible, in the second period, to make $\sum p_2 q_2 \geqslant \sum p_2 q_1$ for every individual If it is to be proved possible to make every individual better off, condition (*a*) should read 'all goods are perfect substitutes' But if all goods are perfect substitutes (*a*) is irrelevant, and condition (*b*) should read simply 'no good is reduced in output' The larger the inequality $\sum P_2 Q_2 > \sum P_2 Q_1$ the less substitutable must goods be for it to be possible, in the second period, to make $\sum p_2 q_2 > \sum p_2 q_1$ for everyone But the definition is not supposed to depend on the magnitude of the inequality However small it is, indeed even if $\sum P_2 Q_2 = \sum P_2 Q_1$, 'real social income' or 'welfare' is said to have increased It does not require any proof to see that $\sum P_2 Q_2 = \sum P_2 Q_1$ does not demonstrate the possibility of making $\sum p_2 q_2 \geqslant \sum p_2 q_1$ for every individual, unless it is true that the output of no good has decreased.

Therefore if we are required to prove that everyone could be made better off, before we can conclude that welfare or real social income has increased, we could never say that welfare or real social income had increased, because it would never happen that the output of no good was less than before. Remembering the value premises we require in order to speak of an increase in welfare, it would also be necessary to add that the distribution of real income must not have changed for the worse. It is evident that such a definition is useless.

Let us return to the original Hicksian definition. Professor Hicks proposed, in effect, that we can say welfare, or real social income, has increased over an earlier period if there could have been some distribution of the goods produced in that earlier period which would make every individual better off now as compared with then, in the sense of being now able to choose that earlier *pretended* position if he wanted Thus, by this definition, we have to say the welfare of society has increased, when the poor are poorer, and even though it might be impossible to restore them to their former position without making the rich worse off in their turn They have only the consolation that there might have been at the earlier period a distribution which would have made them, and everyone else, worse off than at present I don't think many people would on this account want to say that welfare, or real social income, had increased.

Nevertheless, this Hicksian definition leads to the correct solution. Let us recall the sufficient criterion, which we laid down in

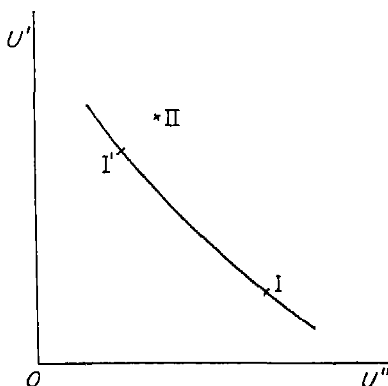
Chapter VI, for an increase in welfare. (*a*) the income distribution of the second position must be not less favourable than that of the initial position, and (*b*) it must not be possible to reach the second position merely by redistributing money. Now Professor Hicks showed, in the above quotation, that no redistribution of the quantities of the first position could have made $\sum p_2 q_2 < \sum p_2 q_1$ hold for every individual now, assuming that the actual second position is unaltered by the earlier redistribution It shows, in fact, that, if the two positions could have been put to the vote, those who stood to lose by the move could not profitably have bribed those who stood to gain to vote against it This follows because if $\sum p_2 q_2$ remained equal to, or greater than, $\sum p_2 q_1$ for *any* individual, then that individual would not have been successfully bribed $\sum P_2 Q_2 \geqslant \sum P_2 Q_1$ shows, in short, that the Scitovsky criterion is satisfied Professor Hicks had, in fact, abandoned, in his 1940 article, the Kaldor–Hicks criterion, and adopted the later-defined Scitovsky criterion As soon as we introduce a value judgement about income distribution it thus ceases to matter whether the gainers could overcompensate the losers or not—it ceases to matter whether $\sum p_2 q_2 > \sum p_2 q_1$ could be made to hold for every individual in the second period Therefore we can conclude that welfare in period II is greater than in period I if $\sum P_2 Q_2 \geqslant \sum P_2 Q_1$ and if the distribution of real income is no worse in the second period.[1]

This criterion is a welfare criterion, but not a criterion for a desirable change (see Chapter VI, p 111) The reason why it is only the former is that we have shown only that the goods actually produced in the first situation could not have made everyone as well off as in the second position. We have not shown that some redistribution in the first situation could not have produced a still better position, account being taken of the fact that the pattern of output would have adjusted itself to the redistribution. In terms of the Utility Possibility Diagram (Fig XII) the curve represents the utility possibilities of the set of goods corresponding to position (I), not the set of factors of production corresponding to position (I) By 'real income' being better distributed at II, we mean that I′ is better than I, where the set of goods at I′ is the same as at I. $\sum P_2 Q_2 > \sum P_2 Q_1$ proves that II is north-east of I′

[1] This, however, assumes that the disutility of work has not increased If a man is just induced to move to an unpleasant area where he produces twice as much, and earns twice as much, the national income increases, but not welfare.

This 'welfare' criterion has been criticized on the grounds of redundancy.[1] It is said that if anyone can say that I′ is better than I, then he could equally well have said that II is better than I. Supposing that II is the present position, and I represents a past year, is this the case? Direct inspection of I is impossible, since there are no time machines Of course, it may still be reasonable to make a judgement directly, eschewing the evidence of index-

FIG XII



numbers, and evidence of the distribution of wealth, by reading novels, social surveys, &c But perhaps most people would think that quantitative evidence in the form of index-numbers of output or consumption, and figures relating to the distribution of wealth, was of assistance in forming a judgement Since the former tell one only that I′ is south-west of II, it is difficult to believe that our analysis is entirely superfluous

The above welfare criterion (it is, of course, only a sufficient criterion, and not a definition) must not be subjected to any base-reversal test We said above that there was no logical reason why the condition $\sum P_1 Q_1 < \sum P_1 Q_2$ should also be required to hold Just as we found that some changes could be recommended although the gainers could not compensate the losers, so we find that if real income is better distributed, and if $\sum P_2 Q_2 \geqslant \sum P_2 Q_1$, then the second position is better than the first, even although it is also

[1] C M Kennedy, 'The Economic Welfare Function and Dr Little's Criterion', *R E.S.* xx (2), no. 52, 1952–3 See also p 106 above

the case that $\sum P_1 Q_1 \geqslant \sum P_1 Q_2$. Similarly the first position is better than the second position if $\sum P_1 Q_1 \geqslant \sum P_1 Q_2$ and if there has been an unfavourable change in distribution between the two positions, even although $\sum P_2 Q_2 \geqslant \sum P_2 Q_1$ [1]

Now the index-number $\sum P_2 Q_2 / \sum P_2 Q_1$ is arrived at by dividing the uncorrected index-number $\sum P_2 Q_2 / \sum P_1 Q_1$ by the Laspeyre price index-number $\sum P_2 Q_1 / \sum P_1 Q_1$ Thus our analysis indicates the superiority of the Laspeyre price index when it is considered that income distribution has changed in a favourable manner. In fact, only by the use of the Laspeyre index can we say that welfare has increased. Similarly, the index-number $\sum P_1 Q_2 / \sum P_1 Q_1$ may be arrived at by dividing the uncorrected index by the Paasche price index-number $\sum P_2 Q_2 / \sum P_1 Q_2$ Only by using the Paasche index can we say that welfare has decreased In a democratic community, with universal suffrage, income distribution will normally tend to move in a favourable direction in the eyes of most people The use of the Laspeyre index is then indicated Those who believe that, in a capitalist community, income distribution must always be changing unfavourably, however it changes, should always use the Paasche price index

The above discussion is very formal We have been assuming that we have exactly the same population of identical men in both periods. In fact, of course, people die, and are born The longer the interval over which we are making the comparison the worse this difficulty becomes. Also we have been assuming that all individuals are choosers, which is far from being true Hardly any individual chooses all the goods he consumes, and some choose none of them But we have seen that people think, to some extent, in terms of averages, or in terms of social groups, and such concepts fulfil rather better than actual individuals the requirement of continuity of choice In thinking about the welfare of the country, one may be prepared to ignore distribution within social groups which have only a small range of real income distribution

We have also been assuming that we have had an unchanging 'population' of goods But if a new good is introduced the formal analysis is upset. If some good, which is available in the second

[1] But it should be noted that a contradiction could still arise if the change in distribution were neutral In this case one would require both $\Sigma P_2 Q_2 > \Sigma P_2 Q_1$ and $\Sigma P_1 Q_1 < \Sigma P_1 Q_2$ for position II to be better than position I, and analogously for I to be better than II

situation, is not available in the first, then we do not require an index-number to tell us that a redistribution of goods could not have put everyone on the same or a higher behaviour line as in the second situation, because the behaviour lines of all those who consume some of the new good are formally incomparable with those of the earlier period. Thus the introduction of a new good formally prevents us from saying that welfare has increased, and, similarly, if a good ceases to be produced, it would prevent us from saying that welfare had decreased Quality changes also can obviously invalidate the analysis

Then, of course, we have the fact that no index-number can be perfect The price index must always be arrived at by sampling Also, of course, the national-income totals themselves are not perfect. But, even if the index-numbers were perfect, our analysis would not fit the real world very well. We thus reach what is by now a very familiar conclusion. Not only must any change in the distribution of income be judged favourable, but also $\sum P_2 Q_2$ must exceed $\sum P_2 Q_1$ by a good large margin before one can have any confidence in one's conclusion. How large this margin must be is a matter of judgement

We have said in an earlier chapter that, in practice, welfare conclusions cannot be tested But the comparison of national-income totals does provide a certain very rough test of the applicability of the welfare analysis Let us suppose that two people agree to accept the two fundamental value judgements of welfare economics. Let us also suppose that they both agree that income distribution did not change unfavourably between the two periods in question We may also limit ourselves to the question whether *consumption* rose (we have so far assumed, in discussing national income comparisons, that all goods are consumed by individuals). We will suppose that an index-number of consumption seems to indicate that consumption rose We ask, need these two people agree that consumption rose? Obviously not, for both can recognize the fact that the real world is not very like the world presupposed by the formal analysis. If one wishes to maintain that consumption has risen, and the other that consumption has fallen, neither can possibly *prove* his case Nor could he prove it, however perfect the statistical techniques might be Of course, if the index-number showed a terrific rise, the person who maintained that consumption had fallen would look silly. One might cease to trust his judgement,

but he could never be proved wrong If, however, the index-number showed only a small rise, it really becomes quite meaningless to say that consumption has either risen or fallen. The extent of the rise which the index-number would have to show before everyone, who agreed on the theoretical value premises required, would also agree on the practical conclusion, is a rough index of the applicability of welfare analysis This is the case, because the only way of testing welfare analysis is by inviting agreement or disagreement with the conclusions from those who accept the premises

The reader may be surprised to find that I have treated judgements about consumption in the same way as I treated welfare judgements In the above paragraph it was implied that the former kind of judgement requires value premises, just as the latter does. We have already seen that the word 'welfare' is an ethical word. But words like 'real income' and 'consumption' are not, of course, ethical words Nevertheless such a statement as 'the real income of the community decreased between 1939 and 1949' strongly suggests that there was a change for the bad; and similarly if it was said to have increased I have therefore proposed that the phrases 'increase (decrease) of welfare' and 'increase (decrease) of real income' should both be logically subsequent to a judgement about the desirability or otherwise of any change in the distribution of welfare (or real income). To say 'the real income of the community is greater' is not much different from saying 'the income of the community is really greater', which is again not much different from 'the community is better off' We have therefore treated 'increase of real income' and 'increase of welfare' as synonymous Now in the above paragraph changes in consumption, not real income, were discussed But to say 'Consumption has increased, &c.' suggests almost as strongly as 'Real income has increased, &c' that something good has happened. If no change in the output of any good occurs, 'real income' has a fairly precise descriptive meaning (although of course any discussion of what should be included in 'real income' is a discussion of values) It simply refers, in a closed community, to the total collection of goods and services sold. Similarly, consumption refers to the aggregate collection of goods and services consumed. But the question whether this collection becomes larger or smaller, when its composition changes, does not admit of any precise, objective, purely descriptive answer The answer given depends inevitably on the relative importance

attached to the different kinds of goods consumed. For this reason, before it is said that consumption is greater, we require that our criterion for a desirable economic change be satisfied, i.e the distribution of consumption must not be worse, and it must not be possible that a redistribution of the goods, consumed in the initial situation, should have put every individual in a position with respect to consumption which would be chosen rather than the position actually reached in the second period. If this criterion is satisfied it is concluded that consumption is greater

Unfortunately, for people to agree on such questions as whether welfare has increased or decreased, it is insufficient that they should agree on the initial value premises required They know that within wide limits it is still possible to disagree because the theoretical anlysis is not perfectly applicable It is all a matter of judgement where the limits lie, but within these limits, consciously or unconsciously, honestly or dishonestly, one can be led to reach one conclusion, or the other, from ulterior motives The surface argument may be about how well the welfare analysis fits the real world. The real argument may be about whether a socialist government is a good thing, or not There is thus the ever-present danger that welfare economics may degenerate into a kind of scholastic tub-thumping

After this digression, let us return to rather more technical matters, and tie up some loose ends. We have shown that there can be no welfare significance in national-income comparisons unless a value judgement about changes in distribution is presupposed. But statisticians, when they present us with national-income totals, whether valued at current prices or at those of some base year, do not, of course, wish to make any such presupposition They wish to present such data as will be useful as a basis from which other people can draw inferences about welfare, or changes in consumption or real income, if they wish to do so. They can, however, preserve this neutrality without any difficulty They can, for instance, say that the total market-value of consumption goods in 1947 was ten per cent greater than the value of the consumption goods of 1939 measured at 1947 prices What they should not do is to conclude that consumption increased There is, after all, no such *thing* as consumption, the size of which can be measured. The first of the above two statements is objective and neutral. The second is neither one nor the other We may at once add that the general practice of statisticians, and that in particular of the com-

pilers of the national-income figures, leaves little or nothing to be desired in this respect.

But we have said that statisticians may wish to provide data from which others can draw inferences about real income, real wages, and so on This raises two questions first, what prices should be used? and, second, what things should be included in an index which people can use as a guide to welfare? As regards the first question, we have so far assumed that market-prices are used. The formal reason for using market-prices is clear They are the prices which individuals have to pay, and our theory regards welfare, real income, &c., as a function of, or logical construction from, the welfares or real incomes of 'individuals' We have, however, pointed out that this theoretical concept can at best only be very roughly applied to a changing population of changing tastes, not all members of which are choosers. Since this is the case, does there remain any good reason for using market-prices, rather than costs, as weights?

At the formal level a precise reason could be given for using market-prices At the applied level—which is the level we are interested in—only imprecise reasons can be given It is probably better to use the weights which pure theory suggests, if there is no particular reason for choosing others, since this procedure brings the logic of the comparison more into the open. This is really only a pedagogic reason. Secondly, it is conceivable, though unlikely, that prices and costs would diverge enough to make the market-price comparison more reliable (the sense in which one comparison can be said to be more reliable than another was made clear in our discussion of the problem of testing the applicability of the analysis) Lastly, although the comparison cannot possibly be given a precise meaning in terms of actual individuals, the individual is usually held to be of importance, and the use of market-prices as weights is more consistent with this kind of social philosophy than the use of an index based on factor costs would be. I think that there is thus some slight reason for concluding that, on the whole, an index, which is to serve as a guide to making welfare, or real income, judgements, would be better based on market-prices—although in almost all cases an index based on factor costs would be just as useful.

The second question—What should be included in the 'guide-to-welfare' index?—we have by-passed by assuming an economy in which all goods are consumed by individuals, that is by assum-

ing an economy with no saving, and no collective or government consumption Let us thus continue to by-pass this question until we have discussed the significance of comparisons of national-income totals in which the goods are weighted by factor costs (including, of course, profits), and not by market-prices

The factor-cost index is supposed to measure production in some sense. Now the production of an economy consists of a heterogeneous collection of goods of various kinds (each kind of good being itself regarded as homogeneous) There is only one clear and obvious sense in which a heterogeneous collection can be said to be larger, and that is when there is more of one kind of good and no less of any kind Accepting this, it follows that production can never be said to have increased if the output of any one good has declined. This is exactly analogous to the view that welfare cannot be said to be greater if any individual is harmed, a view which results from the mistaken idea that the welfare of the community is a heterogeneous collection of the welfares of the individuals comprising the community

Analogous to the Kaldor–Hicks definition of an increase in welfare, we have the view that production can be said to be greater if resources could be rearranged in such a way that the production of every good would be greater Just as the fulfilment of the Kaldor–Hicks criterion indicated, at best, a potential increase in welfare, so, of course, the change by which the output of every good could be increased can only be correctly and accurately described as a potential increase in production.[1] This may seem unduly pedantic I hope, however, that I have said enough about the suggestiveness of economic language to show that pedantic accuracy of description is highly desirable, if one wishes to preserve any neutrality towards the facts one tries to describe

Now if average full costs were equal to marginal costs, the ratios of the weights used in a factor-cost index would be equal to the transformation rates of the goods [2] In that case the condition

[1] If all goods are valued at factor cost the same total must be reached as is reached when each factor used is weighted by the amount it is paid Thus an index which measures potential changes in production must also be a measure of the amount of resources used, assuming that all factors, including entrepreneurship, are included In other words, potential production is the same thing as production potential

[2] Cf J Hicks, 'The Valuation of the Social Income', *Economica*, May 1940, pp 119–20.

$\sum P_2 Q_2 > \sum P_2 Q_1$ would show, for very small changes in production, that, in the second period, more than the goods of the first period could have been produced In other words, it would show that production potential had increased Thus, ideally, the factor-cost national-income measure can be said to be a measure of production potential. It should be noted that, given this interpretation, we do have a contradiction if both $\sum P_2 Q_2 > \sum P_2 Q_1$ and $\sum P_1 Q_1 > \sum P_1 Q_2$. It would then be the case that the goods of the second period could have been produced in the first period, but the goods of the first period could also have been produced in the second period If this is true, we clearly cannot speak of an increase in production potential. Thus, unlike an increase in welfare, an increase in production requires both $\sum P_2 Q_2 > \sum P_2 Q_1$ and $\sum P_1 Q_1 < \sum P_1 Q_2$

But the above theory of changes in production potential is 'extremely shaky' To quote Professor Hicks

. . . It is on this sort of structure that actual index numbers of production are based, but it has to be recognized that it is extremely shaky from a theoretical point of view. Returns are not always constant, prices (ex tax) are not always equal to marginal cost, once these assumptions are dropped the whole argument loses its validity. . . . Some people may be tempted to rush in with the suggestion that a constant degree of market imperfection and constant marginal costs would mend the situation, and is not too bad a hypothesis, but there seem to be crushing objections against this. While there may be some sense in which it is normal for marginal costs to be constant under imperfect competition, that sense can hardly be relevant here, where we are thinking about a whole economy, not a single firm, so that the specificity of factors is of first-rate importance to us Further, unless we have some way of measuring marginal costs directly, we need to assume not only a constant degree of market imperfection, but the same degree of market imperfection in all industries—and that assumption is hardly tolerable [1]

It should be noticed that, in the previous paragraph, it was stated that this analysis was valid only for small changes in production But of course index-numbers are applied where more than marginal changes in the output of individual goods must be allowed for In this event the analysis is valid only if transformation curves are straight lines. This is a far stronger assumption than constant returns to scale, and implies that there is only one factor of production, or that factors are employed in the same proportions for

[1] J. Hicks, 'The Valuation of the Social Income', ibid , p 121

all outputs. The normal assumption of economic theory is, of course, a diminishing rate of transformation as the output of one good is increased and that of another reduced and therefore we should see what the index-numbers can tell us about production on this assumption

Now, since the transformation curve is concave, $\sum P_2 Q_2 > \sum P_2 Q_1$ does *not* tell us that the goods represented by the point Q_1 could have been produced with the factors and techniques of the second situation Similarly $\sum P_1 Q_1 > \sum P_1 Q_2$ tells us nothing about the production possibilities of the two situations Just as the *convexity* of behaviour lines prevents one from inferring anything about utility possibilities from $\sum P_1 Q_2 > \sum P_1 Q_1$ or from $\sum P_2 Q_1 > \sum P_2 Q_2$, so the concavity of transformation curves prevents one inferring anything about production potential from the reverse inequalities But equally $\sum P_1 Q_2 > \sum P_1 Q_1$ and $\sum P_2 Q_1 > \sum P_2 Q_2$ enable one to infer something about production potential. The former tells us that the goods of the second position could not have been produced with the factors and techniques of the first situation even if the production possibility function were linear, and *a fortiori* if it is concave: and the latter that the goods of the first position could not have been produced with the factors and techniques of the second situation

In order to infer that the production potential of the second situation is higher than that of the first one would require at least that $\sum P_1 Q_2 > \sum P_1 Q_1$, and that $\sum P_2 Q_2 > \sum P_2 Q_1$ (the latter in order to avoid a contradiction) But in fact, it is doubtful whether this is enough—for the phrase 'an increase in production potential' would seem to imply that the factors and techniques of the second situation could more than produce *any* set of goods which could have been produced with the factors of the first situation and this no mere index-number can tell us. If then the phrase is used when these index-number criteria are satisfied, it is important to remember that they merely mean that the second situation could more than produce the *actual* goods produced in the first, and the first could not have produced the actual goods of the second.[1]

It may occur to the reader that the approach via, as it were, the goods potential of a situation, and the approach via the utility potential of a set of goods should be combined, and the utility

[1] The above analysis of 'production potential' is based on P A. Samuelson, 'Evaluation of Real National Income', *O E P*, Jan 1950

potential of the two situations be compared, free play being allowed to the sets of goods to accommodate themselves to the different distributions of wealth. If this is done, the result is the conclusion that index-numbers can tell us nothing about the utility or welfare potential of different situations with different transformation curves (see Samuelson, loc cit, above, p. 17).[1] From the point of view of using predicted changes in the national income as a guide to policy this is unfortunate. The fact that the actual goods of the first situation (which may be thought of as the *status quo*) could not make everyone as well off as they would be in the second situation is not a sufficient reason to move to the second situation, in that it might still be the case that *some* set of goods, which would have been produced in the first situation if money had been suitably redistributed, could have made everyone better off than they would have been in the second situation

Struck perhaps by the shakiness of the transformation rate approach to production indices, Professor Kuznets has tried to introduce, or reintroduce, a different concept of production Thus he writes

The widespread tendency to identify social income as a measure of welfare, with social income as a measure of productivity . is grounded upon the sound notion that the 'product', taken as the yield of resources, cannot differ from the welfare equivalent, for the simple reason that the latter represents the positive result of the use of resources, and that resources have no weight independent of the positive result of their employment [2]

This passage seems to be a recommendation to use the word 'product' in the same sense as the word 'welfare'. Thus, to say 'the "product" . cannot differ from the welfare equivalent' is only another way of saying ' "product" is equivalent to "welfare"' If 'production' thus always meant 'welfare production', and it is accepted that the best index for a guide to welfare is the market-price index, then, of course, the best production index is, *ipso facto*, the market-price index Professor Kuznets's claim that the production measure and the 'welfare' measure should be identical would be established But, in fact, 'production' does not mean 'welfare production', although the statement 'production is greater' may tend to suggest that something good has occurred. It is, however,

[1] The reader can also easily satisfy himself of the truth of this with the aid of a diagram containing transformation curves and community-indifference curves, as defined in Ch XIII

[2] S. Kuznets, loc. cit, p 124

obviously not contradictory to say that production has increased, but welfare has diminished. Welfare is not necessarily the positive result of the use of resources To suppose that 'welfare production' and 'production' really mean the same is again to confuse the two ideas which Professor Hicks separated out in the article cited.

In addition to arguing that a 'welfare' measure and a 'production' measure must really be the same, Professor Kuznets also argues that the market-price index, as a matter of fact, is a better measure of production potential This is rather confusing, because, if it were true that a 'welfare' measure and a 'production' measure *must* be the same, then there is no need to show that, as a matter of fact, they are the same But to take the last argument on its own merits, the claim is that marginal costs are better represented if indirect taxes (*less*, presumably, subsidies) are added on The assumption on which this claim is based is that the cost of free government services to firms can be equated to the amount of net indirect tax paid Thus factors would be weighted by the payments to them, *less* direct tax, *plus* transfers, *plus* final free public services. (That is, national income is equal to rent, interest, profits, wages and salaries, *less* direct tax *plus* transfers *plus* final free public services.)

If we agree, for the sake of argument only, that disposable income *plus* final free government services (equal to the usual 'welfare' measure *less* free intermediate services) is what ought to go into a 'welfare' index, then the two indices would coincide It is possible that Professor Kuznets's resultant production index would be better than the ordinary one, which takes no account of changes in intermediate governmental services For instance, if there was an increase in essential intermediate services, *without* an increase in indirect tax, his index would show a fall in productive potential, which would be correct, since the previous collection of final goods could no longer be reproduced On the other hand, if there was simply a change in indirect taxation, without any change in production or intermediate services, Professor Kuznets's index would normally show a change in productive potential, which would be incorrect There would seem to be no particular reason to suppose that this index would be better than the ordinary one, although, in view of the shakiness of any index, it could hardly matter very much which we used, especially since they would be most unlikely to give very different results

It was necessary to discuss an index based on factor costs, because this is the only possible index for those goods and services which are not bought by individuals, and which, therefore, have no market valuation. Thus the market-price index can refer only to goods chosen directly by individuals. Now goods which are chosen collectively may be divided into two classes—'welfare goods' and 'non-welfare goods' Some people might want to declare the latter a null-class, and claim that battleships and tanks contributed to people's welfare. I think, however, that most people who so thought would not want to say that battleships contributed to current welfare, they would rather regard such things as a kind of insurance, rather than actually as constituents of a good life Although it is a matter of opinion what kinds of things should be classed as 'non-welfare goods', the statistician who wants to produce an index which will be most useful as a guide to welfare must make a guess as to what most people would want to see included Roughly speaking, I think most people would want to fit into this category, or regard as costs rather than utilities, those goods and services which are not individually chosen, and would not be regretted by many people if a diminution of them did not tend to a reduction in the amount of any other kind of good—such things as justice, police, and defence The admittance of a category of non-welfare collective goods implies, of course, that we do not ourselves believe that disposable income *plus* government free final services of all sorts comprises the contents of the best index for welfare purposes.

Thus we have three sectors of the economy (*a*) a collective non-welfare sector, (*b*) a collective welfare sector, and (*c*) a sector the goods of which are individually chosen (this is, by definition, a welfare sector) We will still assume, for the moment, that there is no saving

The first sector (*a*) is, by definition, excluded. But clearly both (*b*) and (*c*) must be included. In sector (*b*) the only possible index seeks to answer the question 'Could last year's collection of goods have been produced this year?' Now, as far as sector (*c*) is concerned, we have argued that the market-price index should be used, and that it is a guide to welfare in that it tells us whether any redistribution of income, given last year's goods, could have made every individual as well off as he is this year (given a constant population of choosers, &c.). The question arises as to what justifica-

tion there can be for lumping together two such conceptually different indices. The resultant would be a hybrid to which no definite meaning could be attached Some writers have satisfied their consciences by making the very dubious *ad hoc* assumption that publicly provided goods would just fetch their cost price on the market. We have, however, contended that the sector (*c*) index cannot possibly have any precise meaning in terms of actual individuals anyway And Professor Hicks has shown that the factor-cost index also can have no precise meaning We can therefore cheerfully lump the two indices together, since what we are looking for is the index which will be of most assistance to most people for drawing welfare conclusions, we are not looking for an index with a precise meaning. That would, in any case, be a wild-goose chase. On the other hand, it would be an advantage to have a separate index for both sectors. This is because many people are interested in their comparative growth, their respective magnitudes being of considerable social significance

We must now consider the question of how best to treat savings. Savings can hardly be left out of a welfare measure No one would want to say that people are worse off because they freely decide to save more They might say that their standard of living had fallen, but not their welfare. Therefore, savings should, in my opinion, be considered to contribute to current welfare But all saving, except saving by public bodies, arises in the individualist sector. (Admittedly, there are private collective savings, but perfectly clear-cut lines of division are impossible The two collectivist sectors together may be taken to apply to what is usually called the public sector of the economy. This division is less distorted by the adoption of the convention that undistributed profits are individual savings than it would be by including them in the public collective sector.) Therefore it would appear that all such savings are, for welfare purposes, to be included in the individualist sector, whatever the class of investment to which they correspond This is not, however, altogether paradoxical, for current investment has no direct relevance to the present happiness of individuals But current savings do contribute to people's happiness so long as they believe that their savings will retain their value

Professor Kuznets adopts a different view of savings. He believes that the decision to save should be regarded as a decision to make some real investment. He then suggests that the investment total

and the consumption total may be added, because the value of capital goods is, in theory, the discounted value of their future yields He considers that this treatment approximates better to the true meaning of savings decisions It is difficult to agree with this, when a decision to save is independent of, and by no means always accompanied by, a decision to invest

Professor Kuznets writes.

We must value in terms of current welfare also such parts (of total output) as represent a net addition to (or a net draft upon) the country's capital, whether under private or public auspices [1]

But surely, if an appeal has to be made to future yields, this has not been done The expected future 'yield' of an individual's savings is based on the rate of interest, and the price level of consumption goods now, and in the recent past It seems to me that we approach more closely to the meaning of individual decisions to save if we adopt the alternative view that a decision to save is a decision to accumulate purchasing power over future goods of the kind available in the saving situation This view is consistent with adding in private savings to the welfare sector, without requiring any elaborate assumption about the relation of the discounted value of the yield to the present value of resources The only practical differences between these views are, (1) that, on the present view, public saving should be excluded from the welfare index, and (2) that the income totals should be deflated by a price index comprising consumption goods only

Both views have, however, a common disadvantage In a time of rising prices, caused perhaps by the devotion of much investment to the non-welfare sector, the value of people's savings falls Some people would then probably want to say that saving was only an illusory contribution to welfare They would want to make a distinction between their being really better off, and their only thinking they were better off This, however, raises all the difficulties associated with assuming that $\sum p_2 q_2 > \sum p_2 q_1$ is an adequate criterion of individual welfare The most that one can say is that, so long as one lays emphasis on individual choices, it seems more consistent to accept the view that savings contribute to current welfare, whether they are being used to finance battleships or consumption-goods factories, and our discussion of the welfare mea-

[1] Loc cit, p 13.

sure for the predominantly individualist sector of the economy *is* based on the assumption that great emphasis is laid on individual choices.

It must, however, be admitted that the above discussion is very academic, for it is most unlikely that a budget surplus or deficit would, in normal times, make sufficient difference for it to be reasonable to suppose that one treatment would result in a better guide to welfare than the other. Under abnormal conditions, such as a very severe inflation, no measure based on a quantity index would be of any value. The condition $\sum p_2 q_2 > \sum p_2 q_1$ would have little relevance, even in relation to an individual's welfare, if prices were changing very rapidly, and no relevance to the welfare of the community, unless it was at least given that the resultant large changes in income distribution were approved of

We conclude that the most useful guide for the purpose of making welfare judgements would be to have two indices, one comprising private savings *plus* private consumption, using a market-price index as deflator, and the other comprising the output of final collective 'welfare goods', using an index of costs as deflator. But such indices cannot be treated as *measures* of welfare. They would be better regarded as providing some evidence, which people may use to assist them to make welfare judgements, if they want to.

CHAPTER XIII

WELFARE THEORY AND INTERNATIONAL TRADE

We do not propose to analyse the welfare implications of all the manifold different trade policies which a country might adopt. We shall content ourselves with three of the most important topics first, the 'gains' from international trade, secondly, the 'gains' which can accrue to a country as a result of raising a tariff barrier, and, lastly, the question of the desirability of free trade.

A correct statement of the 'gains' which may accrue to a hitherto isolated country as a result of entering upon international trade can be most simply made in terms of the analysis of the national income which we made in the last chapter

Let us first postulate that all the 'optimum' conditions of production and exchange are satisfied in a certain country Let the money value of the national income be $\sum P_1 Q_1$ The fact that all the 'optimum' conditions are satisfied implies that no other set of goods (such as Q_0) which could be produced would suffice to make everyone as well off as they, in fact, are In other words, the gainers by a movement away from the production aggregate, described by $\sum P_1 Q_1$, would not be able to compensate the losers This implies that $\sum P_1 Q_1 \geqslant \sum P_1 Q_0$, because, as we saw in the last chapter, this condition describes a situation such that the Q_0's could not be distributed in such a way as to make everyone as well off as in situation I.

Next, let us suppose that the trade barriers are removed, and that relative world prices are not identical with the price-relatives in the hitherto isolated country Trade therefore takes place, and we will suppose that a new equilibrium results, such that the national income of the country in question is now $\sum P_2 Q_2$. We assume that all the 'optimum' conditions are again satisfied. It once more follows that no other set of goods which could be obtained by production or exchange would suffice to make everyone as well off as in the post-trade equilibrium position

Now among these other sets of goods which could be obtained is the set produced in the pre-trade equilibrium position It there-

fore follows that $\sum P_2Q_2 \geqslant \sum P_2Q_1$. The interpretation of this inequality is the same as in the last chapter If the distribution of real income is no worse in the second situation, then welfare can be said to have increased. We would not require to assume 'optimum' conditions of production and exchange within the country if it could be assumed that production would be in no way altered by the opening of trade In that case, the above argument also shows that the post-trade position is better than the pre-trade position, in that the set of goods produced within the country, after trade has commenced, would be incapable of making every individual as well off as he is with the goods he actually consumes.

Thus we see that the correct statement of the 'gains' from trade is not that the 'gainers' could overcompensate the 'losers' That is not, as we saw in the last chapter, implied by the condition $\sum P_2Q_2 \geqslant \sum P_2Q_1$. In his article 'The Gains from International Trade'[1] to which the above argument owes much, Professor Samuelson states that 'more of every commodity can be secured with less of every productive service. This ensures us that by Utopian co-operation everyone can be made better off as a result of trade '[2] This conclusion, that everyone could be made better off, presupposes the possibility of a production pattern different to that of the actual post-trade equilibrium position Thus Professor Samuelson argues that trade could make everyone better off, and not that a redistribution of the goods actually obtained by trade could make everyone better off Our statement is rather different We say that the post-trade position is actually better than the pre-trade position, if the distribution of real income has not deteriorated.

We have said nothing about productive services. At the formal level they can be dealt with by the inclusion of leisure among the 'products'. It may also be noticed that the above argument makes no mention of comparative costs in the foreign country When we are considering the gains which may accrue to a single country, this is not necessary. All that is required is that comparative world *prices* should be out of line with comparative real costs in the home country

The gains-from-trade argument has usually been stated in a form which shows that both countries will gain from embarking on some

[1] *C J E P S*, vol v, May 1939, reprinted in *Readings in the Theory of International Trade* (Blakiston, 1949) [2] Loc cit (Blakiston, 1949), p 238

trade For this argument to be valid, it is further required that all the 'optimum' conditions of production and exchange should be satisfied in both countries, or, if all countries are involved, in every country, so that transformation rates are equal to comparative real costs, or else it must be assumed that production is unaltered in every country, so that the problem becomes merely one of exchange. Then so long as trade does not shift the distribution of real income in an unfavourable manner, either between individuals in one country or between countries, it follows that trade increases welfare The argument in favour of universal free trade simply results from pushing the gains-from-trade argument to its logical limits. If to the above assumptions we add universal full-employment, and the absence of external economies, &c , then we arrive at the theory that free trade 'maximizes world welfare', because it results in the fulfilment of all the 'optimum' conditions of production and exchange throughout the world. But it is only 'world welfare' that is supposed to be maximized. An individual country may gain by a restrictive policy, just as an individual monopolist may so gain. This brings us to the question of tariffs

In considering tariffs, we will first deal with the simple two-country two-good case This, and other international trade problems, can be dealt with graphically with the assistance of the device known as the 'community-indifference' curve

The 'community-indifference' curve has been defined by Professor Scitovsky in a manner which does not involve us in the absurdity of treating a community as a person, when it is actual individuals, or small social groups within the community, in terms of which community welfare (or indifference) is defined To quote.

In a Cartesian plane whose axes measure physical quantities of two commodities, say bread and wine, designate by p_0 the amounts of these goods possessed by the community and assume that they are distributed among its members in a given way Assume next that the community is induced by a rise in the price of bread to give up a certain quantity of it, say $b_0\ b_1$. Then it is possible exactly to compensate everybody for his loss of satisfaction by distributing a certain quantity, say $w_0\ w_1$, of wine p_1 therefore is a point of indifference to p_0, in the sense that it represents for each member of the community the same welfare that he enjoyed at p_0 In a similar way, we can draw all points of the community-indifference curve going through p_0

firm ought to be expanded. Some labour might be drawn from outside manufacturing industry, for instance from agriculture, but it is evident that the required equality would come about mainly as a result of a rise in direct costs and a fall in price There would be very little readjustment of productive resources The chief change would be an increase in the real wages of manual labour at the expense of those who live on overheads Thus it would appear that the chief argument against imperfect competition is one of the redistribution of income But this redistribution can also be effected by taxation up to the point where there is a decrease in the supply of entrepreneurs, managers, and supervisory labour, i e a decrease in the supply of the middle classes [1] Beyond that, profits may be squeezed to the point where they cease to be an adequate driving force for a capitalist economy It is curious that this income redistribution argument is not the one which has been stressed [2] The theory has, on the other hand, built up a formidable barrage of emotive phrases to convince one of its social importance —phrases such as 'productive inefficiency', 'misallocation of resources', 'restrictionism', 'degree of monopoly', and so on—to say nothing of the titles themselves '*imperfect* competition', and '*monopolistic* competition' But, in the short run, even at the purely theoretical level, the charge of misallocation of resources has to wait upon a detailed study of the 'degrees of monopoly' which prevail Moreover, we have shown that the theoretical level is a very shaky one One certainly has no real cause to speak of misallocation

of raising prices—and it is always possible that some will not follow suit, in which case much goodwill would be lost These considerations lend support to the view that the 'degree of monopoly' will decrease when demand is strong, and bear little or no relation to any actual or imagined elasticities of demand Thus, although, in the text, we meet 'imperfect competition' on its own ground, that does not mean that we necessarily think that its short-run analysis often bears much relation to the facts (For a discussion of business behaviour, in which marginal analysis is rejected, see P W S Andrews, *Manufacturing Business*, Macmillan & Co 1949)

[1] i e up to the point where the optimum factor-supply condition is seriously upset, as far as those who live on overheads are concerned The socialist economy faces the same problem, however, except in so far as it can take the risks, its managers must still be paid their supply price

[2] It has, of course, been made, cf Meade and Fleming, loc cit , pp 327–8 Probably the reason why it has not been stressed is that many economists wrongly believe that they are being perfectly scientific and objective if they say 'If price is not equal to marginal cost, welfare could be increased' and unscientific if they say 'Welfare could be increased by redistributing wealth in such and such a way '

of resources unless by a detailed study one has at least shown that the shift of resources which would result from a change in some 'degree of monopoly' would increase the national income Unless the ratio of marginal costs in two competing firms was very badly out of line with relative market values, one could surely have no reasonable confidence that this would be the result Ideal outputs exist only in books on economics. In the real world there are no such things.

In the long run, the theoretical welfare implications of the doctrine of imperfect competition are rather different Here the charge is that firms are too small, because, with a falling demand curve, the equality of long-run marginal cost and marginal revenue determines a size of plant which is smaller than that which corresponds to the lowest point on a long-run average cost curve [1] But, except in the unreal case of pure oligopolistic competition (that is, where there is no product differentiation), the reason why the demand curve is falling is that every firm is producing a somewhat different product Since the products are different, the removal of a firm is a non-marginal change involving consumers' surplus. Professor Hicks has remarked on the inconsistent procedure of deducing a falling demand curve from product differentiation, and then assuming that the firm is producing a unique product in arriving at the conclusion that the firm is too small, and there ought to be fewer firms of a larger size Thus he writes

> To emphasize the differences between the products for the purpose of getting a downward sloping demand curve for the individual firm, and then to neglect the differences between the products (irrational preferences!) for the purpose of neglecting the consumers' surplus, is both inconsistent and practically dangerous [2]

[1] This theory can obviously only apply in a limited section of the economy Schumpeter wrote 'Such cases do occur, and it is right and proper to work them out But, as the practical instances usually given show, they are fringe-end cases to be found mainly in the sectors furthest removed from all that is most characteristic of capitalist activity' (*Capitalism, Socialism and Democracy*, 2nd ed , p 85) He notes "This is also shown by a theorem which we frequently meet with in expositions of the theory of imperfect competition, viz the theorem that, under conditions of imperfect competition, producing or trading businesses tend to be irrationally small Since imperfect competition is, at the same time, held to be an outstanding characteristic of modern industry, we are set to wondering what world these theorists live in ' (ibid)

[2] J R Hicks, 'The Rehabilitation of Consumers' Surplus', *R E.S* (1940–1), p 116

Professor Hicks has also expressed himself on the most general formulation of the (welfare) theory of imperfect competition as follows

But when we start from a position where there is an excess of price over marginal cost in the related industries, the social cost of producing a particular article is no longer represented by its marginal cost curve... The social surplus equals consumers' surplus *plus* producers' surplus *minus* loss of potential surplus on other commodities, this may well be negative, when producers' surplus is positive This is the possibility which has been uncovered by the modern theories of imperfect competition; it is, in fact, the correct and general statement of the possibility of loss due to imperfect competition [1]

But it is not, of course, necessarily the case that a new firm, setting up in an imperfect market, will 'decrease welfare' (even on the Kaldor–Hicks definition) because, although it will ignore the loss of producers' surplus elsewhere which it causes, it will also be unable to tap all the consumers' surplus The necessity of the introduction of consumers' and producers' surplus means that there is no clear way of deciding whether there are too many firms producing too many different things, or not The case for standardization on a smaller range of commodities lies outside the pure static theory of welfare It must rest on an overriding of consumers' choices, on the ground that people are irrational or the ground must be that consumers never have the choice between the small range of cheaper goods and the larger range of more expensive ones, and therefore cannot show that they would really prefer the former

My conclusion is that any general charge of maldistribution of resources on the ground that competition is not perfect cannot be substantiated from the basis of welfare theory If the authority of Marshall and Professor Pigou can be evoked for 'marginalism', at least I can claim the support of Keynes, who, with Olympian disdain, wrote 'There is no reason to suppose that the existing system seriously misemploys the factors of production which are in use '[2]

Schumpeter came to the same conclusion, although, for other

[1] J R Hicks, loc cit, p 116

[2] *The General Theory of Employment, Interest and Money*, p 379

mainly dynamic reasons,[1] he believed in the economic superiority of a socialist system. He remarked

Socially irrational allocation of resources is not nearly as frequent or important as it is made out to be. In some cases, moreover, it is no less likely to occur in a socialist economy Excess capacity, also partly inevitable in a socialist economy, will often bear an interpretation which rebuts criticism [2]

We have already remarked that the theory of imperfect competition has tended to blur the distinction, as far as welfare is concerned, between monopoly and competition. This is because the case against both is held to be the same, in that price is not equal to marginal cost. Yet, where there does exist a monopoly or a non-competitive oligopoly, which can foresee no potential competition, it is at least more likely that the phrase 'restriction of output' can be significantly used Even so, we doubt whether there is a valid static-theory argument against monopoly in general. If we define a monopoly as a business whose negatively inclined short-run demand curve will not be significantly affected by the output or price decisions of any other business, it may still be true that few monopolies can be so confident of their long-run security that they can ever afford to 'exploit' the short-run position in the manner portrayed in the text-books [3] And, even if they did so, it still may not be the case that relative marginal cost would be very badly out of line with relative prices—and, as we have seen, this inequality would have to be large before one was justified in speaking of misallocation of resources Nevertheless, it seems very important to

[1] The exceptional (static) reason which Schumpeter gave for preferring a socialist system is the great saving which he believed would result from all earnings being paid net of taxation To quote 'For as a matter of commonsense it would be clearly absurd for the central board to pay out incomes first and, having done so, to run after the recipients in order to recover part of them' (op cit , p 199) But, if incomes are to be linked to marginal productivities, or even to the amount or kind of work done, they must be paid by local managements Surely no one believes that an ideal income distribution can be determined without taking into account, not merely the amount and kind of work, but also the family circumstances of the worker. It is often forgotten that income distribution is not merely an inter-class but also an intra-class matter If this is so, then the amount each worker was to receive would not only have to be paid by local managements, but would also require some calculation P A Y E experience in this respect might convince some people that the great savings, envisaged on this account, would be non-existent Yet, Schumpeter concluded that 'here we have got hold of one of the most significant titles to superiority that can be advanced in favour of the socialist plan' (ibid)

[2] Ibid , p. 194

[3] See above p 266, n 3

retain a clear distinction between monopoly and competition There may be important dynamic differences between the two. And there are certainly important social and ethical differences

We must now take leave of the subjects of socialism and imperfect competition, and take notice of the fact that *laissez-faire* is not dead, but modified Static welfare theory is still being used to support *laissez-faire.* Ruling out, for other reasons, the socialist competitive solution, or regardless of the danger of playing into the hands of the scientific static marginalists, some writers still extol the beauties of *laissez-faire*, in order to demonstrate the 'irrationality' and stupidity of planning No one would, of course, go so far as to claim that *laissez-faire* is ideal But, given that more or less full employment is maintained, by fiscal and financial policy, and given a suitable measure of income redistribution, it is claimed that, for the rest, the unimpeded price-mechanism is pretty good at solving the economic problem, and that planning will distort the allocation of resources in an irrational or uneconomic manner.

Unless the extent of the planning and its nature is described, there is little that can be said At the one extreme, if planning takes no notice of costs whatever, it is clear that welfare theorists could object But then probably no economist would advocate such planning At the other extreme, if interference is only made when welfare theory indicates control as a solution for some problem, or when serious disequilibria occur, or in spheres in which welfare theory does not apply (we have in mind the question of standardization), or where it is particularly unplausible (in matters of investment), then clearly little or no case can be made out against planning No general case can be made either way. Economic welfare theory is not so realistic that it can claim that the onus of proof always lies with the planners, although, of course, one's political views may lead one to this conclusion Also it must be noted that planning in general is not a political issue It only becomes one if the extent of planning is in question.

In some people's minds the real controversy between planners and anti-planners is not one to which welfare theory has any relevance It is rather the question what kind of welfare theory is acceptable. The important issue is believed to be the question whether planning, of a degree to which anti-planners object, is compatible with the retention of a liberal set of values The fear of these anti-planners is that the planners will inevitably tend to

substitute their own values for those of the market.[1] If planning is so complete that no free market exists (some market must always exist, for if there is no free market a black or grey market is inevitable) no other outcome is possible. But even if a consumers' market exists, it may merely be used for the purpose of distributing that stock of goods which, the planners have decided, is to be made available for consumption. Any physical planning, and even financial planning by taxation or subsidy, implies some degree of divorce between production and market valuations, unless it is used merely to correct obvious discrepancies which may tend to occur spontaneously when decentralized profit maximization is the driving force, or, in a decentralized democratic socialistic system, the chief regulator of the economy.

Almost everyone agrees that some divorce between production and the dictates of a free market is desirable, even if the interference is only such as to prevent the production of brothels, or the unregulated sale of dangerous drugs. But our analysis has led us to the view that it is usually very difficult to be at all sure when, on our individualistic assumptions, one would do good by interference and when not. We have suggested that certain obvious cases for interference occur. The most obvious and important cases are the control of aggregate demand, and some measure of welfare redistribution. In such cases, intervention with the processes of *laissez-faire* obviously do good. Then there are cases where planning is inevitable and cannot be held to conflict with individuals' preferences, because the market mechanism does not allow these to express themselves (the obvious case being goods which can only be collectively consumed). There are also 'neutral' cases where it is far from obvious that planning will do good, but where it cannot be held to conflict with individual preferences, because it is very unplausible to suppose that they are adequately reflected by the market mechanism (the obvious example being aggregate investment). What is certain is that planning yields high returns at first, but that these returns decrease rapidly to a margin beyond which it cannot be said whether it does good or not.

There are, in fact, two such planning margins—an intensive and an extensive margin. People of an individualistic and liberal turn

[1] The theory that this is inevitable is put forward in Walter Eucken's article 'On the Theory of the Centrally Administered Economy. An Analysis of the German Experiment', *Economica*, May and Aug. 1948.

of mind, even supposing that they hold similar views about income and property distribution, may, nevertheless, differ widely about where the margins lie. There may thus be a fairly broad area of disagreement, without any ideological conflict Nevertheless, if Smith wishes to extend planning further than the point, or points, beyond which Jones believes that it is far from obvious that welfare would be increased, then the latter is liable to suspect, rightly or wrongly, that Smith is beginning to substitute some other values for those of the market Because of the fact that individual preferences can direct the economic system only in a comparatively crude manner, it is sometimes difficult to know whether the premises of those who disagree are really the same, or whether the issue lies between someone who sees the price-mechanism as a good method of democratic decentralization, and someone who believes in planning for reasons other than that it may correct some of the divergences from an individualistically determined optimum (however vague), which are certain to occur in a *laissez-faire* economy Questions of welfare, real income, efficiency, &c , cannot be debated at all, at the economic level, if people are at variance on this latter kind of issue

We may now sum up our discussion of the political implications of pure static welfare theory We do not believe that it can be reasonably and honestly used in defence of, or against, any particular political system The marginalist socialist 'blue-print' is a formal system of deductions of highly dubious applicability, even in an absolutist state, and certainly incapable of application in a democratic state In my opinion, static welfare theory could only convince someone who was blind to realities, and very susceptible to emotive language, of the benefits of socialization Equally, it could only convince someone who was similarly blind, and open to suggestion, of the benefits of *laissez-faire* The theory suggests that some planning is beneficial But planners cannot reasonably claim its support for much—probably not for enough to make planning a very controversial issue These conclusions are reached in the face of the fact that the theory has been persistently used, by all sides, as a political weapon.

CHAPTER XV

CONCLUSIONS

THIS book might, in part, be described as a study of the usage of influential and persuasive language in economics. Wherever it has been found that the terminology of economics is, in this sense, normative, we have suggested that the ethical issues involved should be brought right into the open. Unless this is done, it is often not at all clear whether a dispute is one of fact, or one of value. A discussion, which is superficially objective and factual (because frankly ethical expressions are not used), but which is really about values, though the contestants may not realize it, is usually unhelpful, and may tend to create ill feeling.

I am far from suggesting that economists must try to be neutral on ethical issues (the fact that, for instance, I have chosen to give an exposition of the traditional welfare economics implies an acceptance of certain liberal values). As I have said, the distinction between economist *qua* economist, and economist *qua* ordinary mortal, is one that cannot be very easily maintained. Bringing ethical questions into the limelight does not imply any kind of neutrality. There is, admittedly, a tendency to think that once it has been shown that people differ on questions of value, then nothing more remains to be said. But this is a mistake. One can often convince someone, by reasoning with him, that one's own ethical beliefs are better than his. This is, however, different from trying to get one's opinions accepted by means of a propaganda use of language—different, that is, from trying to put something over by means of implicit persuasive definitions.

Thus I am not crusading against the use of all influential language in economics—that would be to oppose the use of all ethical judgements in the subject. I only want it to be recognized that many of our economic phrases are emotive. If this is not recognized, then many real, though apparently sham (because terminological), battles will continue to be fought. If, however, it is recognized that such battles may be real ones—of values—then they could be better waged, with more enlightenment for the spectators, if the decks were cleared of any encumbering pseudo-objective terminology. I am, in fact, suggesting a better separation, in

economics, of different levels of discourse. This cannot be achieved if it is not recognized that many economic statements, which appear at first sight to be merely descriptive, have value implications. Among the most important of such phrases are 'increase of welfare' and 'increase of real income'.

I have rejected the utilitarian view that the logical calculus of 'welfare' economics should be interpreted in terms of satisfaction or happiness, on the ground that it is misleading to describe welfare economics as the science which studies the economic causes of the happiness of communities. So to describe it suggests a degree of objectivity and precision which is lacking It is, for instance, very much a matter of opinion whether some given redistribution of money would increase or decrease happiness I also claimed that there is an element of prescription in judgements about the happiness of communities But even if I am wrong about this, it is, in any case, certain that people will slip into using prescriptive terminology—will slip from statements about happiness to statements about welfare, and thence to the use of words such as 'improvement' and 'benefit'—without paying much attention to the change I have taken the view that the essential purpose of welfare economics is to prescribe, and that therefore certain questions of value are begged unless it is explicitly based on value judgements

Thus my rejection of the utilitarian scheme of things has not been based on the perhaps rather dogmatic objection that satisfactions cannot be added, and certainly not on a 'denial' of interpersonal comparisons. As a matter of fact, I think that many people, in deciding what ought to be done, often employ some sort of hedonistic calculation. But such calculation is not *logically* essential to prescriptive economics What we require are judgements about the sort of thing that ought to be done, and it does not matter to us what imaginative processes people employ to help them arrive at such judgements.

Accordingly I have proposed that welfare economics be based on the following sufficient criterion for a desirable economic change an economic change is desirable if (*a*) it would result in a good redistribution of wealth, and if (*b*) the potential losers could not profitably bribe the potential gainers to oppose the change.[1] Two value judgements are presupposed by this criterion. The first

[1] This is subject to certain qualifications as to the sense of the word 'desirable' which it would be tedious to repeat at this point. See Ch VI

is that an individual becomes better off if he is enabled to reach a position higher up on his order of choice. The second is that the community is better off if one individual becomes better off, and none worse off It is thought that both of these judgements would be widely acceptable It has further been shown that the above criterion is sufficient, given enough *factual* assumptions, to deduce that a realization of the 'optimum' conditions of exchange and production would be a good thing, so long as a worse distribution of wealth would not result, or could be avoided by compensation [1]

I have claimed that the above foundations are firm Anyone may accept welfare economics on such a basis, or reject it But the important thing is that it is clear what has to be accepted or rejected If the conclusions follow from the axioms, and the meaning of the axioms is clear, then a system can be said, I think, to have firm foundations.

The suggested criterion is not, of course, objective Whether a given economic change would be good or bad remains a matter of personal opinion. For it is a matter of opinion whether or not the change would cause a good, bad, or neutral redistribution of wealth or welfare It must be emphasized that this does not imply that welfare economics is useless. Most people would accept the two fundamental value judgements The theory, *if the required factual assumptions are deemed realistic enough*, in any particular case, enables such people to agree on the goodness or otherwise of the change, given that they give the same answer to the question about distribution. And even when there is no agreement about income distribution, useful conclusions may be reached, of the form 'This redistribution would be attained better by change *A*, than change *B* '

Thus I think that welfare economics may best be considered as the study of whether or not one configuration of the economic system is better or worse than another and whether a change from one to the other should be made Whenever these questions arise, whether explicitly or by implication, then I suggest that the answer be based on the above criterion This means that welfare economics is not solely concerned with the development of 'optimum' conditions It is concerned not only with prospective changes, but also with the results of actual changes which have occurred It is

[1] We also, of course, have to assume that any induced non-economic changes are neutral or good

obvious that the question whether economic welfare increased over some past period is a question in welfare economics. It is not quite so obvious that the same question whether posed with reference to real income, wealth, production, real wages, consumption, or standards of living, is also a question in welfare economics. But all these words or phrases belong to the pseudo-objective terminology of economics. They are substantival words which look as though they refer to something, changes in the magnitude of which may be measured, but this appearance is misleading. The size of a collection of incommensurable kinds is a concept which requires the assignment of weights, which determine the relative importance, *for some given purpose*, of the different kinds. One cannot, strictly speaking, discuss the question of changes in the size of such collections at all. The size of a thing *is* something objective, which is independent of the purpose of the measurement. But the 'size' of, say, the national real income has no such independence. Nevertheless, there is a correct answer (or rather, the form of a correct answer) to such a question as 'has real income increased?'. This is because the purpose, which determines the weighting, is suggested by the value implications of the sentence 'the real income of society has increased'. In other words, the purpose is to discover whether or not there has been an improvement. Consequently our 'welfare' theory tells us that the weights must be market prices, and that the answer to the question must then be determined by reference to our fundamental criterion.

Welfare economics is, then, likely to be useful if its factual assumptions are realistic enough. We saw that the question whether they are realistic enough is very difficult to answer, because the conclusions of the theory cannot, in practice, be tested. Whether its conclusions, in any particular case, are to be accepted or rejected is thus, even given agreement on all questions of value, a matter of judgement and opinion. There is no question of proof.

The first difficulty is that our criterion often, in practice, rests on the assumption that money may be redistributed without offending against any of the theoretical 'optimum' conditions. Such redistribution would frequently be an administrative or political impossibility.[1] Therefore many changes may have to be admitted to be

[1] Or it may be impossible because the potential losers have no 'lump-sums' which can be used to bribe the potential gainers. However, if there were no property, then a good redistribution of earned income by direct taxation would

desirable although they do not satisfy the criterion Thus a change may be held to be good, if it effects a good redistribution, although, in theory, this redistribution could have been better carried out by 'neutral' money transfers. Therefore our criterion must be regarded only as a sufficient criterion for a desirable economic change, and not as a definition of 'an increase in economic welfare' Its applicability, in opposing a particular change which would result in a good redistribution of real income, is limited by the practical possibility of carrying out the required redistribution in some better way.

But, in every case, the exact application of the theory would require the existence of eternal and perfectly consistent individuals, who choose between infinitely divisible goods of unchanging quality In my opinion this unreality does not in itself suffice to make the conclusions of the theory worthless, but does make it silly to treat them as anything but rough guides to practice It was argued that any divergence from 'optimum' conditions must be large before one could have any reasonable degree of confidence that an improvement would result from trying to satisfy them.

The above assumptions suffice only for the derivation of the 'optimum' exchange conditions, and, given perfect statistics, for the use of index-numbers in judging whether real income, consumption, &c , has changed The 'optimum' conditions of production require many further unrealistic factual assumptions, and are, accordingly, less trustworthy In particular, we found that the theorem that output ought to be adjusted until price equals marginal cost is extremely shaky, and we did not feel justified in taking much notice of it except in a few special cases This theorem is the most important and the most controversial conclusion of welfare theory It lies behind many of the widely accepted practical implications of economic theory It is highly controversial because it is the only one of the 'optimum' conditions which also has serious political implications The fact that I cannot bring myself to believe that the distinction between average and marginal cost is, more

satisfy our criterion The potential losers could not profitably bribe the potential gainers to oppose the change, because the bribes required would be the exact equivalent of the proposed taxation This would only not be the case if the bribe could be capitalized, and property transferred Thus the fact that there might be no 'lump-sums' to transfer does not necessarily render the criterion inapplicable, although it does imply that it might not be a good thing to put the optimum labour-supply condition into operation, or make marginal cost equal to price

than very seldom, of the slightest importance to the welfare of society, has led me to the view that this branch of economics—pure static welfare theory—is, or rather should be, of little or no political import

We can, on the other hand, scarcely doubt that welfare theory is sufficiently realistic to tell us that relative costs of production should not be allowed to get too far out of line with relative market-prices. As a *rough* guide to what ought to be done, it is undoubtedly useful. If one says that welfare economics is useless one means that its precise conclusions cannot be taken seriously. The common-sense argument that if the market value of one thing is twice that of another, then it is usually worth producing if it does not cost more than twice as much—ambiguous though it is—is probably just as valuable, and is certainly less misleading than such conclusions as 'price ought to equal marginal cost'

Common sense is sometimes bad theory, and then it may mislead. But it is often good, but crude, theory. Economic welfare is a subject in which rigour and refinement are probably worse than useless. Rough theory, or good common sense, is, in practice, what we require. It is satisfying, and impressive, that a rigorous logical system, with some apparent reality, should have been set up in the field of the social sciences· but we must not let ourselves be so impressed that we forget that its reality is obviously limited, and that the degree of such reality is a matter of judgement and opinion

APPENDIX I

The Logic of Strong Ordering

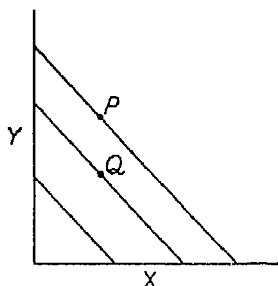
by C B Winsten

In economic theory the assumption of mathematical continuity is very convenient Most of the geometrical reasoning based on various types of curves, such as demand curves, uses such an assumption. However, continuity is a deep notion and opens up the possibility of many bizarre and unrealistic situations, so that it is necessary, as far as possible, to have strong enough postulates for these situations to be precluded

In the text and in Appendix II an axiom of strong ordering is used. This supposes that, for any two different collections of goods P and Q, one is definitely chosen rather than the other. There is also a transitivity axiom, that if P, Q, and R are three different collections, and P is chosen rather than Q, and Q rather than R, then in a choice between P and R, P will be chosen. However, if these axioms are taken as they stand, they still leave the possibility that, in one of the situations commonly considered in economics, the consumer's choice will not be determinate, even though his preference field is completely defined in accord with the axioms

One preference field which gives this paradoxical result is the following.

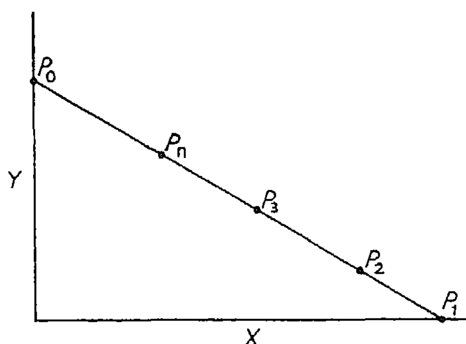
Fig. xv



Suppose there are two goods X and Y, and suppose the points P and Q represent two collections of these goods Draw lines at 45° to the axis through P and Q as shown in Fig XV. Then suppose P is chosen rather than Q if it is on a higher line than Q This defines the preference field unless P and Q lie on the same line

On any particular line, order the collections of goods as follows

FIG XVI



Let P_0, the extreme left-hand point of the line, be the least preferred on the line Next above it, let P_1, the extreme right-hand point, be preferred Now order the other points higher the farther to the left they are on the line, supposing that all the remaining points are preferred to P_1, and therefore, by the transitivity postulate, to P_0 Thus, in Fig XVI, the points are ranked $P_3 > P_2 > P_1 > P_0$

There is now no point on the line that is preferred to all the others For since there is an assumption of mathematical continuity, however far to the left P_n is, provided it does not coincide with P_0, there is still another point P_{n+1} between P_0 and P_n, and this point will be preferred to P_n In turn there will be another point between P_{n+1} and P_0 preferred to P_{n+1} Thus we can continue to rise in the preference scale by getting closer to P_0, yet we never attain a maximum because P_0 itself is the least preferred point on the line

Now suppose that the prices of X and Y are such that the line $P_0 P_1$ is a budget line. Then given this range of choices the consumer will prefer points on $P_0 P_1$ to others, but will not prefer any point on $P_0 P_1$ definitely above all others This odd situation arises solely because of the assumption of continuity.

If we wish to avoid this paradox, while still retaining strong ordering, it seems adequate to replace the pair of postulates given above by the following pair

1. In any closed and bounded set of the commodity space, one point is chosen.
2. If P and Q are two points both of which occur in two sets in the commodity space, and P is chosen in one of the sets, then Q will not be chosen in the other.

In the first of these postulates, we extend the range of possible

choices from the start, and do not try to limit it to pairs at first However, we limit it to bounded sets (which do not give the possibility of indefinitely large collections of goods) and also to closed sets (and these for present purposes we can say are sets which include their boundary lines)

The second postulate is one of consistency It takes the place of the transitivity axiom, and implies that there is a definite ordering of *P* and *Q*

The two postulates together imply transitivity, and therefore imply a strong ordering of the system This result can be seen as follows

Suppose in a pairwise choice, *P* is chosen rather than *Q*, and in another pairwise choice *Q* is chosen rather than *R*. Then in applying the consistency postulate to the two sets (*P*, *Q*) and (*P*, *Q*, *R*), since *P* is chosen in the set (*P*, *Q*), *Q* cannot be chosen in the set (*P*, *Q*, *R*) In the same way, applying the consistency postulate to (*Q*, *R*) and (*P*, *Q*, *R*), *R* cannot be chosen in (*P*, *Q*, *R*) Thus *P* is chosen in (*P*, *Q*, *R*), and so, applying the consistency postulate yet again to (*P*, *Q*, *R*) and (*P*, *R*), *P* is chosen from (*P*, *R*)

The two new postulates thus include the old postulates of strong ordering, but are strengthened to exclude the possibility given at the beginning of this note In practice, of course, it would be entirely impossible to observe such subtleties of choice given above, but such postulates enable us to use rigorous mathematical reasoning without hedging the statements with exceptions.

APPENDIX II[1]

The Construction of a Behaviour-line System from Actual Choices[2]

DEFINITIONS

1. A collection of goods is said to be *larger than* another collection if there is more of one kind, and no less of any kind. Similarly for *smaller than*
2. A consumer is said to *choose* a certain collection *A rather than B* if, when he buys A, he could have bought B, i e. in index-number form, if $\sum p_a q_a \geqslant \sum p_a q_b$
3. A given *price-income situation* is a situation in which the consumer's income and all prices are given.

AXIOMS [3]

I A consumer chooses a larger collection of goods rather than a small collection

II If a consumer chooses A rather than B, and B rather than C, then he chooses A rather than C

III Every possible collection of goods is chosen in one and only one price-income situation

Consider Fig XVII.[4] X and Y are two goods, quantities of which are measured along the two axes. MN is a budget line (or price line). B represents the collection of goods chosen from the possibilities indicated by all the points on and below the line MN It can therefore be said that B is chosen rather than any of these points (by definition 2)

Next, the budget line is rotated about the point B, continuously altering the price-income situation in such a way that the consumer could still just buy the collection B In each of the resultant situations

[1] Except for the comment at the end, this appendix is the same as in the first edition But since the subject has been treated in several further articles since it was written, a comment has been added at the end I wrote in the first edition, 'this construction is of no particular importance to welfare economics, or indeed any other kind of practical economics' One might amend this judgement by deleting the words 'particular' and 'practical'

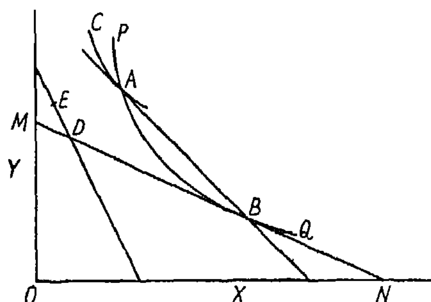
[2] This construction is suggested by the work of Professor Samuelson in his *Foundations of Economic Analysis*, ch vi, 'A Note on the Pure Theory of Consumers' Behaviour', *Economica*, 1938, and 'Consumption Theory in terms of Revealed Preference', ibid , Nov 1948 Also my article 'A Reformation of the Theory of Consumers' Behaviour', *O E P* , N S , no 1, Jan 1949

[3] These axioms are not quite sufficient A further mathematical postulate is required See p 286

[4] Borrowed from Samuelson, *Foundations of Economic Analysis*, p 148

a certain collection is chosen. The curve PBQ is the locus of the points representing these collections, it may be called an offer curve Take any one of these points A, the line AB is then the budget line on which A is the chosen point A is therefore chosen rather than B, and similarly for any other point on the curve PBQ, and *a fortiori* (by Axiom I) for any chosen point above the curve PBQ This curve PBQ can only touch MN at B, elsewhere it must lie above it If, as the budget line was rotated through B, a finite move to a point A was made only after

FIG XVII



it had moved through some finite angle, then B would have been chosen in more than one price-income situation This would occur whenever the consumer continued to consume exactly the same collection of goods in spite of a small change in their prices It follows that the offer curve must be continuous, and tangential to MN at B [1]

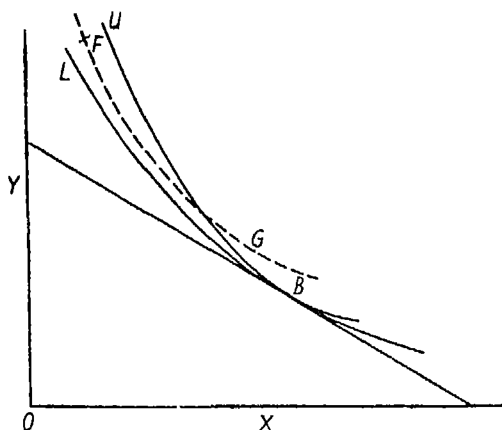
Now take the point A In a similar manner, an offer curve can be drawn through A Since it must, using the results obtained above, be tangential to AB at A, it must cut the curve $PABQ$, and therefore enlarge the area within which it can be said that all points are chosen rather than B This follows because any point C on or above the new offer curve is chosen rather than A (that is, the relation $\sum p_c q_c \geqslant \sum p_c q_a$ holds) and A is chosen rather than B (the relation $\sum p_a q_a \geqslant \sum p_a q_b$ holds) The point A can slide along the curve PBQ and generate a family of similar new offer curves Again, points can be taken on these latter curves, and new offer curves generated, and so on Eventually a limit will be reached, and the boundary of the resultant area within which it can be said that all points are chosen rather than B can be shown to be a smooth convex curve It will be called the *upper behaviour line* of B.

[1] If the offer curve approached MN at B' between M and B, then points between B and B' would not be chosen in any price-income situation, *contra* Axiom III

Now let us take a point D on the budget line MN We know already that B is chosen rather than D. Next rotate MN about D until D is itself the chosen point We then know that D is chosen rather than any point E on the new budget line Similarly D can, by moving along MN, generate a family of new budget lines, and so on, as for the previous construction Again, we will reach a limit which will be called the *lower behaviour line* of B This curve must also be continuous and convex to the origin

It is now required to show that these two behaviour lines through B

FIG XVIII



coincide This will be proved by a *reductio ad absurdum* Therefore in Fig XVIII the two behaviour lines of B (BU and BL) are drawn separate The area between the two may be called *B's region of ignorance* Within this region let us take any point F, and construct a lower behaviour line of F (shown as a broken line in the diagram) The first possibility is that this lower behaviour line of F cuts the upper behaviour line of B, as in the figure But then we would have some point, such as G, which would be chosen rather than B But F would be chosen rather than G, and therefore, *a fortiori*, rather than B Therefore, *contra hypothesi*, F would not lie in B's region of ignorance

The next possibility is that the lower behaviour line of F passes through B itself It might be thought that this would imply that F would be chosen rather than B This is not, however, the case because the points on F's lower behaviour line (which is the boundary of the area containing points rather than which F is chosen) cannot themselves be held to be necessarily 'worse' than F. This possibility must therefore

be excluded by a further postulate which will ensure that no point lies on more than one lower behaviour line In mathematical terms the required postulate is to the effect that in the differential equation defining a set of lower behaviour lines—$dy/dx = f(x, y)$—f has continuous partial derivatives This same postulate suffices also to exclude the remaining possibility that the lower behaviour line of F should cut that of B.

Therefore, given the above postulates, it follows that no region of ignorance can exist. The upper and lower behaviour lines of B must coincide in one curve which can be simply called the behaviour line of B Thus the conventional set of smooth, convex, non-intersecting 'utility' curves can be derived from certain axioms about economic behaviour It may be noticed that the convexity of utility curves is here deduced as a theorem Convexity is the equivalent of Marshall's 'law' of diminishing marginal utility Thus everything which could be deduced from this psychological 'law' can also be deduced from our axioms about economic choices

These axioms are all implicit in the usual indifference curve analysis They are not, of course, in the least realistic But, given them, it becomes possible to arrange all conceivable collections[1] in order of choice, using as our criterion of choice the index-number formula $\sum p_a q_a \geqslant \sum p_a q_b$, which, by definition, is the criterion of A being chosen rather than B Therefore the index-number formula may be regarded as fundamental to the theory of consumers' behaviour [2] Here it must be mentioned that,

[1] Strictly speaking, those collections which lie on the same behaviour line as B cannot be determined to be 'better' or 'worse' than B, merely by observing market choices This is because the behaviour line is a limit reached only as the result of an infinite process Thus Professor Samuelson (*Economica*, Nov 1948, p. 251) states 'the points lying literally on a frontier locus can never themselves be revealed to be better or worse than A *If we wish, then, we may speak of them as being indifferent to A*' (my italics) If we supposed that observation of actual economic behaviour was the only conceivable method of construction of behaviour lines, then I think that Professor Samuelson would agree that the statement 'the points on A's behaviour line are indifferent to A' would be insignificant, or, in his terminology, operationally meaningless But the behaviour-line system, given the assumption that utility is maximized, could conceivably be constructed by asking the consumer to name all collections 'better' and 'worse' than A The points actually on the line could, then, be significantly said to be arranged in order of choice, because this order could in principle be discovered Thus to call the points on a line indifferent to each other, is not merely misleading, but also rules out the (imaginary) methods of construction of behaviour-line systems by questions about hypothetical choices, or by confronting the consumer directly with choices between collections which he does not have to pay for

[2] For certain purposes the construction of 'indifference curves', or behaviour lines, is unnecessary Professor Samuelson (*Foundations of Economic Analysis*, pp. 111, 115) shows that all the theorems of demand theory can be derived from the proposition $\Sigma p \, \Delta x \leqslant 0$ implies $\Sigma (p+\Delta p) \, \Delta x < 0$ But this proposition can

if we are dealing with only two situations, then it is, of course, possible that an individual be on a higher behaviour line although it would not be possible for him to buy the goods of the former situation. What the above analysis tells us is that, if we could have as many other situations as we liked, then we could always bring the two initial situations into comparison by bringing in the other situations as stepping-stones For instance, *A* may be on a higher indifference curve than *Z*, but it may not be true that $\sum p_a q_a \geqslant \sum p_a q_z$ Nevertheless, using this criterion, it must be possible to say that *A* is chosen rather than *Z*, by bringing in the fact that *A* is chosen rather than *B*, *B* rather than *C*, . and *Y* rather than *Z* Thus, it becomes possible to say that *A* is chosen rather than *Z*, although *Z* was not an immediate possibility I do not think this is stretching the ordinary usage of the word 'choice' too far.

Finally, it may be said that this market-behaviour conception of behaviour lines is, in some ways, the most enlightening It is well known that it is, in fact, impossible to draw up indifference curves by asking questions For one thing the subject cannot rid his mind of the known exchange values of the collections he is asked to choose between In practice the only way we can find out if a person is in a chosen position is by employing the index-number criterion $\sum p_2 q_2 \geqslant \sum p_2 q_1$, together with $\sum p_1 q_1 < \sum p_1 q_2$ as a test of consistency If the employment of these tests gives no information (as when $\sum p_2 q_2 < \sum p_2 q_1$, and $\sum p_1 q_1 < \sum p_1 q_2$), then it might be possible to find a mediating point which would suffice for us to be able to say which was actually higher up on the order of choices. The behaviour line may be regarded as the ideal limit which would be attained if we could always bring every pair of situations into relation by means of the index-number criterion

Further Comment

1 Professor Georgescu-Roegen has criticized Axiom II as being 'incorrect' [1] By this he means that I could not stipulate that *A* should be chosen rather than *C in the sense of definition* 2 This is true, and I should have written '*A* would be chosen rather than *C* if there was a free pairwise choice between the two' Definition 2 then requires to be enlarged to ascribe a meaning to choice in a non-market situation. The critics of 'revealed preference' theory, or of my claim that the behaviour-

be deduced from the definition of consistency as follows Given that an individual once bought the collection Q_1, rather than Q_0, that is, given that $\Sigma p_1 q_1 \geqslant \Sigma p_1 q_0$, then it follows that if he ever buys Q_0 it must not be the case that $\Sigma p_0 q_0 \geqslant \Sigma p_0 q_1$, because in that event he would have been able to buy Q_1, and he would then, by definition, have chosen Q_0 rather than Q_1, which would be inconsistent Therefore $\Sigma p_1 q_1 \geqslant \Sigma p_1 q_0$ implies $\Sigma p_0 q_0 < \Sigma p_0 q_1$ Therefore $\Sigma p_1 (q_0 - q_1) \leqslant 0$ implies $\Sigma p_0 (q_0 - q_1) < 0$. Therefore $\Sigma p \, \Delta q \lesssim 0$ implies $\Sigma (p + \Delta p) \, \Delta q < 0$

[1] 'Choice and Revealed Preference', *S E J*, Oct 1954

line system was constructed from actual choices, would then say that this was an illegitimate resort to choice in a non-market situation If revealed preference theorists had to limit themselves solely to observation, of course they could get nowhere An observation that 'Smith chose *x*' tells one only that Smith chose *x*, and did not choose any of the other possibilities The claim was (or should have been) that given certain assumptions about people's choices (which need not all be testable by observing only market behaviour) then the system of curves can be built up by observing only behaviour If, however, one takes the view that the theory is pointless unless the assumptions are testable in terms of market behaviour, Axiom II can be reformulated to get over this difficulty

Professor Georgescu-Roegen has shown[1] that this was the merit of Professor Houthakker's so-called strong axiom [2] Professor Houthakker's axiom (which may be said to define 'semi-transitivity') is that if *A* is chosen rather than *B* and *B* rather than *C* , and *Y* rather than *Z*, then *Z* must not be chosen rather than *A* We may now extend the meaning of 'chosen rather than' so as to be able to say that *A* is chosen rather than *Z* in the above circumstances (I had already made this extension of the meaning of choice, but in terms of full rather than semi-transitivity) Now suppose that *A* is chosen rather than *B*, and *C* is chosen rather than *A*, in the manner of Fig XVII These relations imply that *A* is not chosen rather than *C*, and *B* not chosen rather than *A* [3] But it is obvious from the construction of Fig XVII that *C* was not among the possibilities when *B* was chosen—hence *B* was not chosen rather than *C*, and never would be since, by Axiom III, *B* is not chosen in any other price-income situation Thus by the extended definition of 'chosen rather than', and the relation of semi-transitivity, *C* chosen rather than *A*, and *A* rather than *B*, implies *C* is chosen rather than *B*—which is full transitivity.

But this restatement does not yet fully achieve the task of removing altogether axioms which cannot be tested by market behaviour Axiom I clearly cannot be so tested But in fact it would seem that Axiom I is unnecessary, since definition 2 in fact does the required trick of enabling one to compare points on the budget line with those below it It seems to me difficult to object to this definition

2 A flaw in the construction is the postulate that the differential equation defining the set of lower behaviour lines should have continuous partial derivatives, since this cannot be given any testable meaning in terms of economic choices This postulate is not required

[1] Idem [2] 'Revealed Preference and Utility Function', *Economica*, 1950

[3] An axiom to this effect (Samuelson's so-called 'weak axiom', see *Foundations*, p 151) should have been stated among the axioms, but is now contained in the axiom of semi-transitivity

to rule out the possibility that the lower behaviour line of *F* cuts that of *B* (see my cited *O E P* article) But it is required to eliminate the possibility that it joins it at *B*. Thus if behaviour lines are branched as in Fig V, p 28, the construction appears impossible, supposing that in this diagram *AC* is the true behaviour line of *C*, then the present construction would trace the line *AC* as the upper behaviour line of *C*, but it would also trace the line *BC* as the lower behaviour line of *C*. So far as I can understand them, it appears that all other 'revealed preference' practitioners have made some similar analytic assumption. (See Georgescu-Roegen, loc. cit, p 128)

3 Another difficulty (also pointed to by Professor Georgescu-Roegen, loc. cit,) is that Axiom III cannot be true unless some of both commodities are consumed—or in the general case some of everything But in the general case this is obviously false. Scarcely anyone consumes something of everything (But eliminating this axiom also upsets the usual conclusions of welfare economics (see pp 25–26, and Appendix III, above) as well as revealed preference theory) However, this does not seem to be an additional difficulty to that discussed in (2), since, given that we assume continuous partial derivatives, there is no need for the present axiom as well

4 Professor Houthakker in the article cited has shown that the present kind of analysis can be extended to more than two goods In so doing he shows that if transitivity holds good, then the behaviour lines can be integrated into surfaces (This in fact had been already shown by Professor Georgescu-Roegen[1]) He proves formally that the points on the surfaces are equivalent (= symmetrical, reflexive, and transitive) to each other, so that they can be regarded as indifferent (since indifference is also an equivalence relation) This, however, does not mean that they could not be ordered by choice—for even if they were, they would still be equivalent in the sense of belonging to the same boundary line.

[1] 'The Pure Theory of Consumer's Behaviour', *Q J E*, 1935–6

APPENDIX III

Kinked Behaviour Lines and Boundary Optima

IT was stated in Chapter II that much of Welfare Economics remains valid even if it is not assumed that individual behaviour lines are smooth curves

First consider the 'optimum' exchange condition. One can no longer speak in terms of the equality of different individual's marginal rates of substitution as a necessary condition for an optimum, because unique marginal rates of substitution are no longer assumed to exist One can, however, still say that, with given totals of goods to be distributed, it is a *sufficient* condition of a Pareto optimum that all individuals should be free to trade as they please at a price which equates total supply and demand This follows simply from the assumption that everyone's equilibrium point is where the budget line touches but does not intersect the highest behaviour line It follows that no two individuals' behaviour lines (as in an Edgeworth box diagram) can intersect. It is, however, no longer necessary that there should be a single price, in that it would be possible to have a different price for those individuals with kinked curves, without shifting their equilibrium points at all

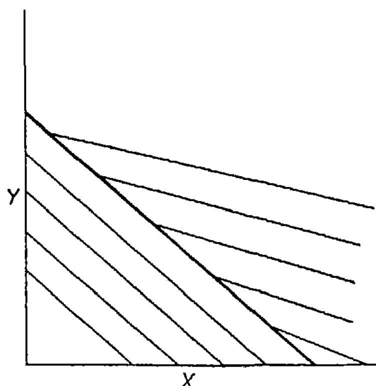
Secondly, the condition that the marginal rate of transformation between two goods should equal the marginal rate of substitution no longer applies Instead we have the condition that the marginal rate of transformation be equal to the relative equilibrium market prices of the two goods If this condition is satisfied, then, for the reasons given in the above paragraph, the transformation curve cannot intersect any individual behaviour line Taken in conjunction with the other 'optimum' conditions, this is a sufficient condition of a Pareto optimum. It is no longer a necessary condition in that it becomes possible for the transformation curve to intersect the price line without intersecting an individual behaviour line

The theorem derived from these conditions, that if the production of all goods be carried to the point where marginal cost equals price, then (in the absence of external economies and diseconomies) a Pareto optimum is reached, remains valid But it becomes a sufficient condition, rather than a sufficient and necessary one The theorem that perfect competition fulfils this condition is unaffected

That welfare economics is basically undisturbed by kinked behaviour lines is a point of more than purely technical interest It may very well be true that in so far as people behave consistently at all, they behave in a manner which implies kinked lines. This is liable to be the case if

people, to some extent at least, order their choices by reference to two or more guiding principles, arranged in order of priority but otherwise incommensurable. Let us take an example which illustrates the principle [1] Suppose a man chooses between two goods on the basis of first a 'life' principle, and secondly a 'pleasure' principle, 'life' having top priority until it is fully satisfied Until he has enough calories, vitamins, &c., for good health, the fact that he likes certain combinations more than others plays no part Such a scheme of choice would produce a behaviour pattern of the type illustrated in Fig XIX

FIG XIX



The heavy curve is the locus of points of satiation of the 'life' principle· only on and above this line does the 'pleasure' principle take over The points on any given 'life' curve are all ordered by the pleasure principle, and they *cannot* therefore be described as indifference curves.

That kinks are likely to be very common can be seen by the following consideration There are in most people's budgets some goods, with non-zero prices, of which no more would be consumed if there were an 'income-compensated' fall in their prices (The fall in price must be 'income compensated' otherwise it might be claimed that the reason was that they are inferior goods) This implies kinks I personally would say that a great majority of the goods I consume are in this class. One reason for this is of course the indivisibility of many consumption goods But another is the fact that (perhaps in order to simplify life a little, and not always be calculating) one pursues certain kinds of wants to satiation point before thinking of other ways of spending money

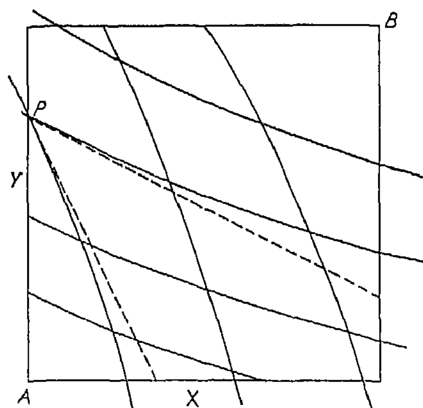
The implications for welfare economics of kinked behaviour lines are

[1] The example is suggested by N Georgescu-Roegen, 'Choice Expectations and Measurability', *Q J E*, Nov 1954

the same as those of 'boundary optima' The reader will have noticed in Chapter VIII that the illustrated optimum position was always within the 'box'. What happens if it is at the edge of the box as in Fig XX?

Within the box there is no point at which the behaviour lines are tangential to each other. The 'optimal' points all lie along the left-hand and upper edges of the box, which thus form the contract curve. Consider one such point *P*. Through *P* are drawn two price lines (the dotted lines) one tangential to *A*'s behaviour line, and the other to *B*'s Now either of these price lines, or any between them, would produce *P*

FIG. XX



as an equilibrium point From any point on either of them, it would pay both *A* and *B* to exchange until the limit was reached when *A* had no more *X* to give

It follows from this that one cannot speak of equality of marginal rates of substitution Nevertheless, it can easily be seen that, starting from any point on the diagram, a price must establish itself (if both trade freely, and the price falls or rises in response to excess supply or demand) which results in a position on the left or upper edge of the box. Consequently, as with kinked curves, it remains true that a single market price which equates supply and demand is a sufficient condition for the 'optimum' allocation of fixed collections of goods between individuals.[1] Modifications similar to those made above to allow for kinked behaviour lines apply to the other optimum conditions Marginal cost pricing (together with the exchange conditions) remains a sufficient condition

[1] This case has been dealt with more generally by K J Arrow in 'An Extension of the Basic Theorems of Classical Welfare Economics', *Cowles Commission Papers*, N S, no 4

of a Pareto optimum, while the theory that perfect competition leads (in the absence of external economies and costs) to a Pareto optimum also remains valid [1]

At first glance 'boundary optima' may appear unrealistic but this is only because our diagrams are limited to the two-good case Second thoughts suggest that there is a large number of things one does not consume at all, and this is likely to apply to everyone Indivisibility may be the most important reason for this but not the only one, for most people will be able to think of many divisible things they do not consume In general, when the commodity space is multi-dimensional one would therefore expect every consumer's equilibrium point to be on a boundary or corner of the space.

Finally, there is the question whether the mere statement of the 'optimum' conditions as being sufficient for achieving Pareto optima, rather than as necessary for any 'optimum', represents a significant weakening of welfare economics—whether, in fact, it makes it less applicable At first sight it does weaken the theory Thus the non-fulfilment of the 'optimum' conditions in the real world cannot any longer be taken as proof that one is not at a Pareto optimum It could still be argued that putting the conditions into operation would ensure that one *was* at a Pareto optimum, and that it is better to be sure This might not, however, seem very compelling Therefore only disapproval of the prevailing distribution of wealth might be taken as a sufficient reason to make a change In theory, therefore, this modification would seem to weaken welfare economics but in practice it is very doubtful whether it does so This is because the practical choice is never between keeping to the *status quo* or putting *all* the 'optimum' conditions into operation and so ensuring a Pareto optimum In practice our choices are between 'sub-optimum' positions, and the case for a change is in terms of the probable satisfaction of Scitovsky or Kaldor–Hicks criteria.

All this is, however, of small importance. For the presence of only one consumer who has a unique rate of substitution equal to the relative prices of the two goods in question means that it remains a *necessary* condition for an 'optimum' that the rate of transformation should equal this rate of substitution Unless it is so, this particular consumer could be made better off without harming anyone else if the relative outputs of the two goods were slightly changed—and this could not have been achieved by any new deal of the same output of goods. The upshot therefore seems to be to accept the 'optimum' conditions as necessary, and at the same time to recognize that boundary maxima and kinked behaviour lines are likely to be almost universal

[1] Professor Arrow (loc cit) cites an exception but it appears to be one which is ruled out by our assumption that behaviour lines do not slope north-eastwards.

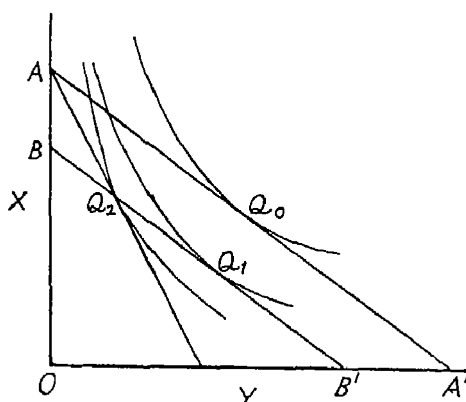
APPENDIX IV

Direct versus Indirect Taxes[1]

THE usual analysis of direct versus indirect taxation (or subsidization) runs typically as follows [2]

A single 'economic man' who spends his income on two goods (one of which may be 'money') is assumed In Fig. XXI Q_0 is the equilibrium tax-free position When an income-tax equal to *AB* of *X* is imposed, Q_1 is reached. The same sum could be raised by an indirect tax on *Y*, which would result in a position such as Q_2. From the usual convexity assumption it follows that Q_2 is worse than Q_1 Q E D

FIG XXI



At first sight this result always looks like a conjuring trick There is no overt reference to marginal costs. Yet it is well known that nothing can be proved without some such reference.[3] The covert reference is as follows for the proof to be valid the government must be able to buy the same collection of goods whether the individual is at position Q_2 or at position Q_1. This it can do only if $Q_2 Q_1$ has the same slope as the

[1] This appendix is based on my article with the same title in *E J*, Sept 1951.

[2] Cf M F W Joseph, 'The Excess Burden of Indirect Taxation', *R E S.*, June 1939, H P Wald, 'The Classical Indictment of Indirect Taxation', *Q J E*, Aug 1945, A M Henderson, 'The Case for Indirect Taxation', *E J*, Dec 1948, A T Peacock and D Berry, 'A Note on the Theory of Income Redistribution', *Economica*, Feb 1951

[3] Cf the original Frisch–Hotelling controversy—*Econometrica*, 1939, pp 145–60, in particular Professor Hotelling's final note, pp. 158–60.

transformation curve of X and Y (the curve showing the maximum amounts of X which could be produced given varying quantities of Y, and fixed amounts of all other goods) From this it follows that the slope of BB' must equal the relative marginal costs of the two goods. Thus, in Fig XXI, relative marginal costs are assumed to be the same both at Q_2 and Q_1

FIG XXII

Although Fig. XXI is drawn with reference to a single individual, it may be presumed that it is designed to illustrate the relative effects, on each of many individuals, of two different tax systems of equal monetary incidence. Therefore, a considerable shift of production must be allowed for. This being the case, the assumption that relative marginal costs are the same at both Q_2 and Q_1 is in conflict with the normal assumption used in this connexion, that of a diminishing marginal rate of transformation The analysis is excessively and unnecessarily partial in other ways The prices of goods, other than those represented, may change when the indirect tax is substituted for the direct When this is allowed for, it is even conceivable that any given individual would gain as a result of the change

But none of this invalidates the usual conclusion (that the gainers could overcompensate the losers if direct taxes were substituted for indirect) *given that the supply of labour is not a variable* In Fig XXII the curve TQ_2Q_1T' is the transformation curve of X and Y, given the quantities of all other goods, and also given the quantities of X and Y demanded by the government [1] At Q_1 relative price is assumed equal to

[1] The assumption that the government's demands are absolute is made only

relative marginal cost (this is indicated by drawing in a 'community indifference' curve tangential to the transformation curve at Q_1) But at Q_2 this cannot hold, for Y has been made more expensive relative to X, while it has become relatively less costly to produce (at the margin). Thus the fact that the position Q_2 is not 'optimum' follows simply from the divergence of relative prices and relative marginal costs No other proof is required or possible. But we shall show that the equalization of relative marginal costs and relative prices is not a sufficient condition for an improvement, even given that the distribution of wealth is not adversely affected, *unless* one makes the quite unwarranted and special assumption that the supply of labour is unaffected

The contrary view has been put by A M Henderson, who argued that the fact that all marginal taxation is a tax on work (it can also be regarded as a subsidy on leisure, as far as substitution effects are concerned) does not destroy the case against indirect taxation.[1] The argument is that both indirect and direct taxes sin against the necessary 'optimum' condition that the rate of substitution of leisure for any other good must equal the rate of transformation between leisure and that good But, it is argued, indirect taxes *also* prevent the rates of substitution between pairs of goods, excluding leisure, being equal to their respective rates of transformation Thus Henderson wrote·

> If a given revenue is required then the resources available to the consumer must be limited to the same extent by either method (i e direct or indirect taxation) But the method of indirect taxation has the further disadvantage of reducing the efficiency with which these resources are used, and therefore imposes an added burden [2]

This argument is unsatisfactory because it assumes that the resources used are identical in both cases, as can be seen by the reference to '*the* resources available to the consumer'. In other words, it has to be assumed that the supply of labour is the same whether the taxation is direct or indirect. This amounts to saying that, for every individual, the cross-elasticity of demand for leisure with respect to all other prices is zero, i e leisure is not substitutable for any other good To all intents and purposes, the assumption that the amount of labour does not vary has crept into an argument designed to show that direct taxation is better than indirect taxation, even when the supply of labour is admitted as a variable This might not matter if it were really plausible to suppose that it would, under no conditions, vary much But this is not a plausible supposition

Consider a perfectly competitive economy with three goods, one

for simplicity of exposition We could in principle treat the government as an 'economic man' with a consistent set of utility curves

[1] Loc cit

[2] Loc cit, p 545

being leisure Designate leisure by Z and the other two goods by X and Y Let S and T stand respectively for the marginal rate of substitution and the marginal rate of transformation We can now distinguish three cases as follows

I Direct taxation Here we have

$$S = T \text{ for the pair } (X, Y),$$
$$S \neq T \text{ for the pair } (X, Z),$$
$$S \neq T \text{ for the pair } (Y, Z)$$

II Indirect taxation on one good other than leisure. Letting the taxed good be X, we have

$$S = T \text{ for the pair } (Y, Z),$$
$$S \neq T \text{ for the pair } (X, Y),$$
$$S \neq T \text{ for the pair } (X, Z)$$

III. Unequal indirect taxation on both goods other than leisure Here we have

$$S \neq T \text{ for all three pairs}$$

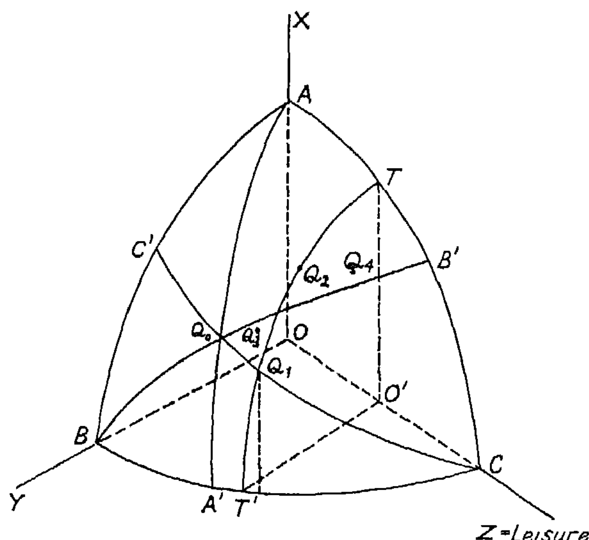
A comparison of Cases I and II makes it sufficiently obvious that no argument against indirect taxation can be perfectly general The two cases are quite symmetrical Unless special assumptions are made, whatever can be said about one can be said about the other. But even if Case III is considered to be what is normally meant by indirect taxation, nothing appears to follow

Let us illustrate this In Fig XXIII ABC is the production surface after subtraction of the government's fixed demands It is assumed that the government succeeds in manipulating the budget surface so that the community's chosen point on that surface is also a point on the production surface ABC If the chosen point were above the surface the government would not be getting the goods it required, if below it would be getting more than it required

The points Q_0, Q_1, Q_2, Q_3, and Q_4 are points on the surface AA', BB', and CC' are surface lines along which one of the three 'optimum conditions is satisfied Thus at any point on the line CC', the partial rate of substitution (leisure constant) of Y for X equals the partial rate of transformation (leisure constant) These contract lines, if projected on to the planes BOC, AOC, and AOB respectively, would be analogous to ordinary contract curves The point Q_0 is the only point at which all the optimum conditions are satisfied Case I lands us on the line CC' between C and Q_0 Case II lands us either on AA', between A' and Q_0, or on BB', between B' and Q_0 Case III brings us to some point which lies on none of the contract lines Part of Fig XXII is embedded in Fig XXIII The plane surface $TQ_2Q_1T'O'$ appears in both diagrams.

The advocates of direct taxation or subsidization have to claim that every point on CC' is better than any other point on the production surface It is intuitively obvious that there is no reason whatever for claiming that points on the line CC' are superior to those on the lines AA' and BB' The lesser claim might, however, be made that points on a contract line are superior to points not on a contract line

FIG. XXIII



What, then, can be said about the relative superiority of points such as Q_0, Q_1, Q_2, Q_3, or Q_4? First, Q_0 is 'superior' to any other point because all the 'optimum' conditions are satisfied [1] In other words, a 'community-indifference' surface is tangential to the production surface at Q_0, and cannot lie below the production surface at any other point. Secondly, the 'community-indifference' surface appropriate to Q_1 cannot lie below the production surface in the neighbourhood of the point Q_2 This is because it is tangential to the line $T'Q_1 Q_2 T$ at Q_1. Thirdly,

[1] By saying one point is 'superior' to another we mean that its 'community-indifference' surface passes outside (farther from the origin than) the other point in the neighbourhood of that point, which implies that the potential losers by a move from the latter to the former would be unable profitably to bribe the potential gainers to oppose the change Therefore no point x can be 'superior' to any other chosen point y if the indifference surface of x is below the production surface in the neighbourhood of y.

it is quite consistent, both that these two conditions should be fulfilled and that the same indifference surface should or should not lie below the production surface in the neighbourhood of a point such as Q_3. There therefore appears to be no reason whatever to support any claim that Q_1 must be 'superior' to Q_3 A movement from Q_1 to Q_3 would reduce the amount of leisure But it is also conceivable, given suitable production and indifference surfaces, that the indifference surface of Q_1 should lie below the production surface in the neighbourhood of a point like Q_4, where the amount of leisure is increased The conclusion is that nothing whatever can be said about the 'superiority' of direct taxation unless it is certain that the amount of leisure will not change

We have seen that Professor Henderson based his argument on the contention that the supply of labour would be constant This means, in terms of Fig. XXIII, that it is presumed that a change from direct to indirect taxes would always cause a movement from a point like Q_1 to one like Q_2, leisure remaining constant Taken to its logical extreme, such a contention is highly paradoxical It implies that the amount of labour supplied is a function only of the quantities of goods consumed by the government. In the limit this implies that people would work as much even if income-tax was 100 per cent of all incomes, consumption goods being supplied free! In general, it must be said that the 'purely theoretical' case against indirect taxation is non-existent

We have seen that there is no general theoretical argument against indirect taxation. There is, on the other hand, quite a lot to be said in favour of it, apart from the paternal reason that people do not always know what is good for them It is a cheaper method of taxing the poorer classes, and it cannot be so easily evaded as income-tax Adjustments of indirect taxation can be made more rapidly than adjustments in direct taxation It is therefore useful in regulating effective demand In abnormal times, as when it is desired to cause a shift in the propensity to consume, it is useful to have indirect taxation which can be rapidly increased or decreased If people take such shifts to be temporary, then the desired effect may be achieved. Again, in abnormal times, when shortages prevent output being adjusted until price is equal to marginal cost, indirect taxation (which then sins against no 'optimum' conditions) may prevent some undesirable redistributional effects It may thus be used as an anti-profiteering weapon

Taking everything into consideration, we can hardly complain if administrators have largely ignored 'the case against indirect taxation'. This is not to say that there may not sometimes, in particular cases, be a good case against indirect taxation A typical argument is 'Why tax luxuries? It would be better to increase the progressiveness of income-

tax, and leave those who remain comparatively rich to direct production as they will' It is left to the reader to judge how strong this argument is, bearing in mind the above arguments and also the fact that some luxuries may give rise to external diseconomies Possibly, for some people, the validity of the argument would turn on this question of whether the particular luxury gave rise to external economies, or diseconomies, of consumption It should also be noted that indirect taxation of luxuries shifts the real income of people with equal money incomes in favour of those who have larger families

If any general statement can be risked, it is simply that the best taxes are those on goods for which the demand is least elastic The same holds true for subsidies Income-tax, which is analogous to a subsidy of leisure, is not exceptional Only in so far as the demand for leisure is highly inelastic is it a good tax. The purely theoretical 'case against indirect taxation' is an illusion It is a particular case of a more general illusion that adjusting outputs until prices are equiproportional to marginal costs is sufficient for an improvement, or would be sufficient for an improvement if the distribution of wealth were not adversely affected

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